

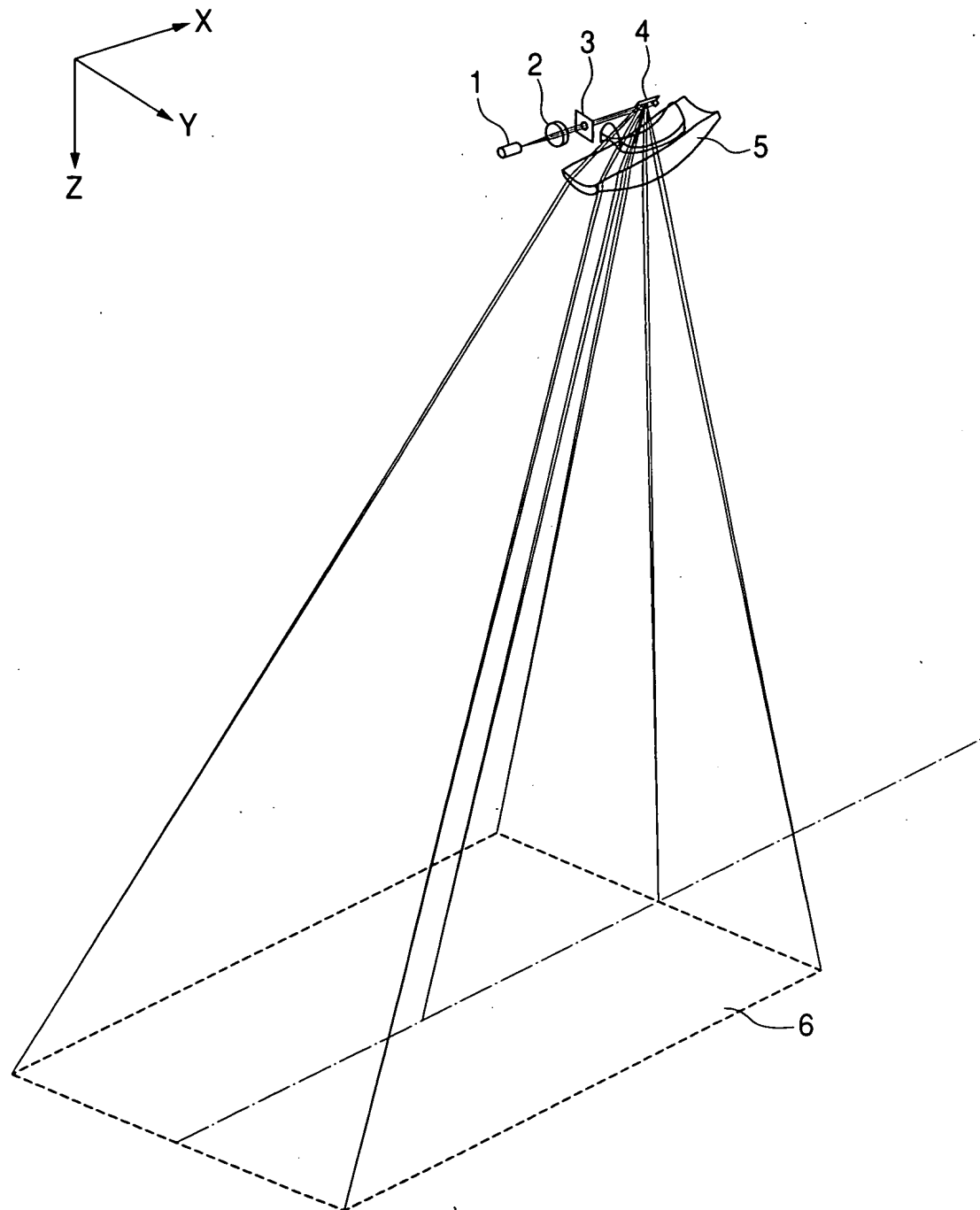
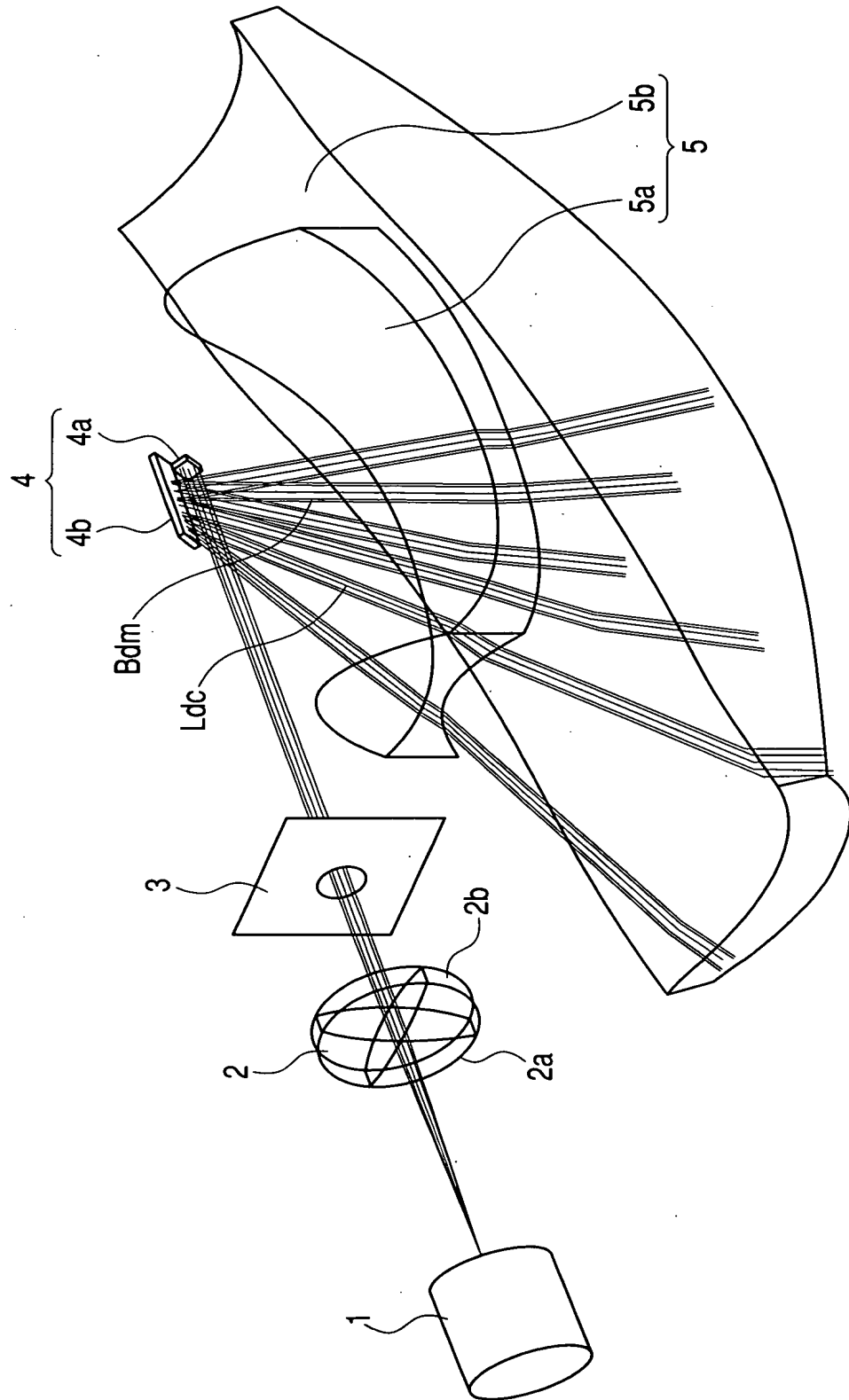
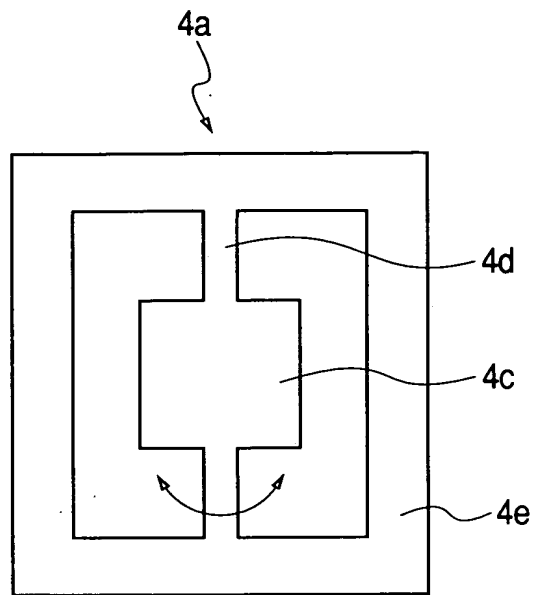
**FIG. 1**

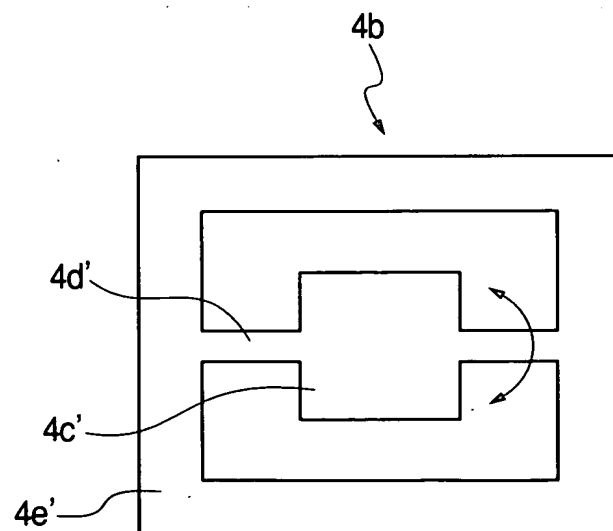
FIG. 2



*FIG. 3A*



*FIG. 3B*



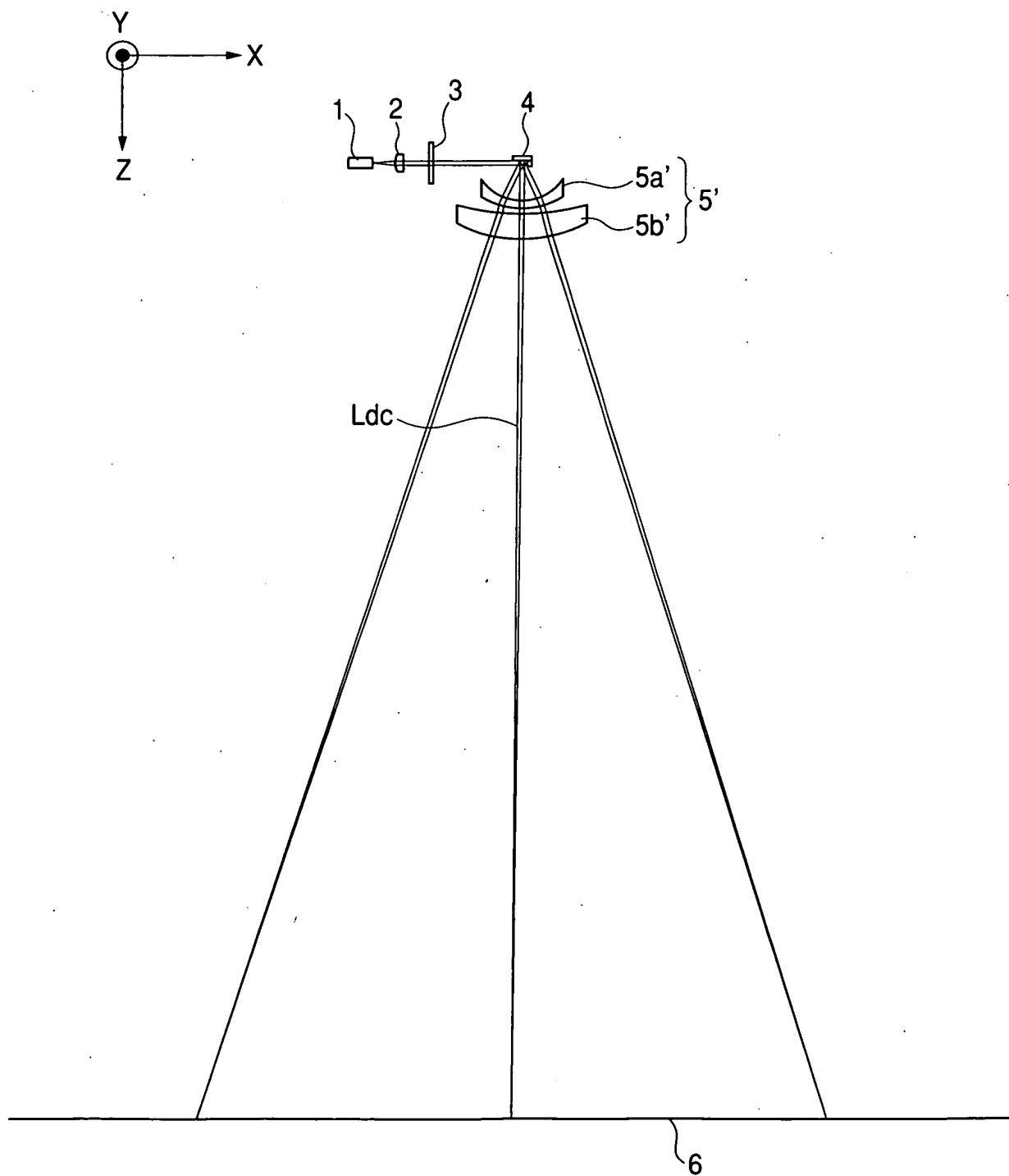
**FIG. 4**

FIG. 5A

OPTICAL SYSTEM												
OPTICAL SURFACE		RADIUS OF CURVATURE	SURFACE SEPARATION	POSITION OF SURFACE VERTEX			TILT OF NORMAL TO SURFACE		REFRACTIVE INDEX	DISPERSION		
DEVICE	SURFACE	Y RADIUS OF CURVATURE	SURFACE SEPARATION	POSITION Z	POSITION X	POSITION Y	TILT ZX	TILT ZY	Nd	$\nu d$		
		(mm)	(mm)	(mm)	(mm)	(mm)	(deg)	(deg)				
DEFLECTING UNIT 4	REFLECTING SURFACE		19.490	0.000	0.000	0.000						
FIRST SCANNING LENS 5a'	INCIDENT SURFACE	-52.6860	3.000	19.490	0.000	0.000	0.000	0.000	1.53064	55.5		
	LIGHT EMERGENCE SURFACE	-72.9672	2.000	22.490	0.000	0.000	0.000	0.000				
SECOND SCANNING LENS 5b'	INCIDENT SURFACE	-89.0572	12.712	24.490	0.000	0.000	0.000	0.000	1.53064	55.5		
	LIGHT EMERGENCE SURFACE	-61.7955	432.671	37.202	0.000	0.000	0.000	0.000				
SURFACE TO BE SCANNED 6				469.873	0.000	0.000	0.000	0.000				

FIG. 5B

ASPHERICAL COEFFICIENT					
DEVICE	FIRST SCANNING LENS 5a'				K
SURFACE	INCIDENT SURFACE				-1.8977E+01
	$\gamma^0$	$\gamma^2$	$\gamma^4$	$\gamma^6$	$\gamma^8$
$x^0$	0.0000E+00	-2.4329E-03	9.5563E-05	4.2894E-07	-6.3143E-10
$x^2$	-4.5363E-03	8.9788E-05	-3.7654E-07	-1.9146E-09	0.0000E+00
$x^4$	-7.1872E-05	6.0851E-07	-5.6160E-09	0.0000E+00	0.0000E+00
$x^6$	-4.7550E-08	2.5491E-09	0.0000E+00	0.0000E+00	0.0000E+00
$x^8$	-1.1199E-10	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

FIG. 5C

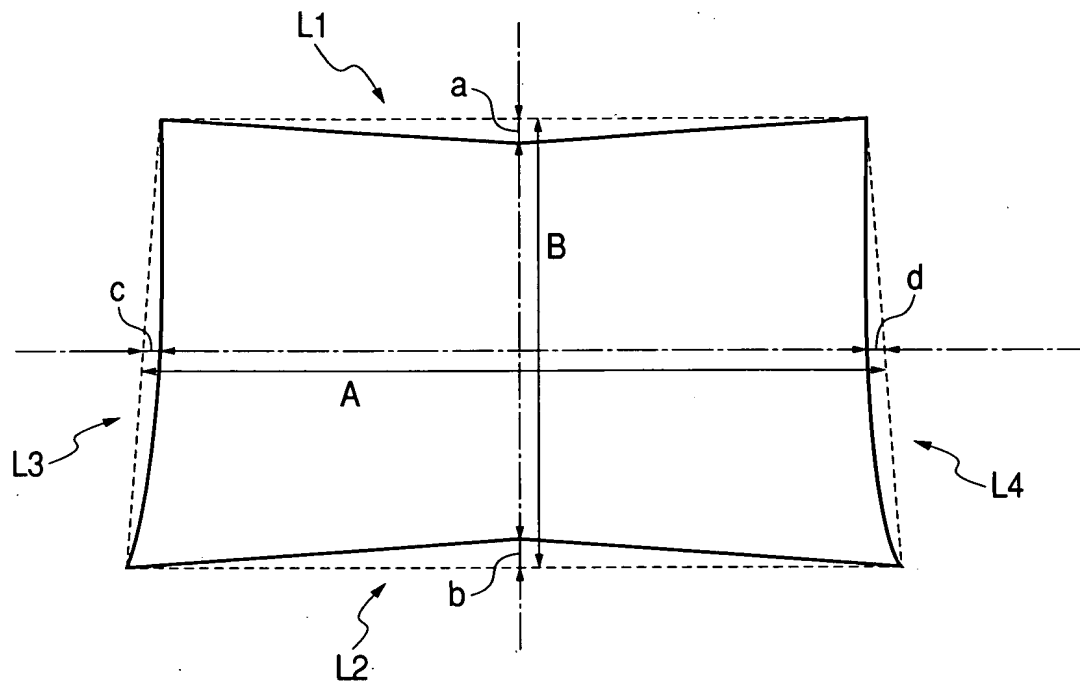
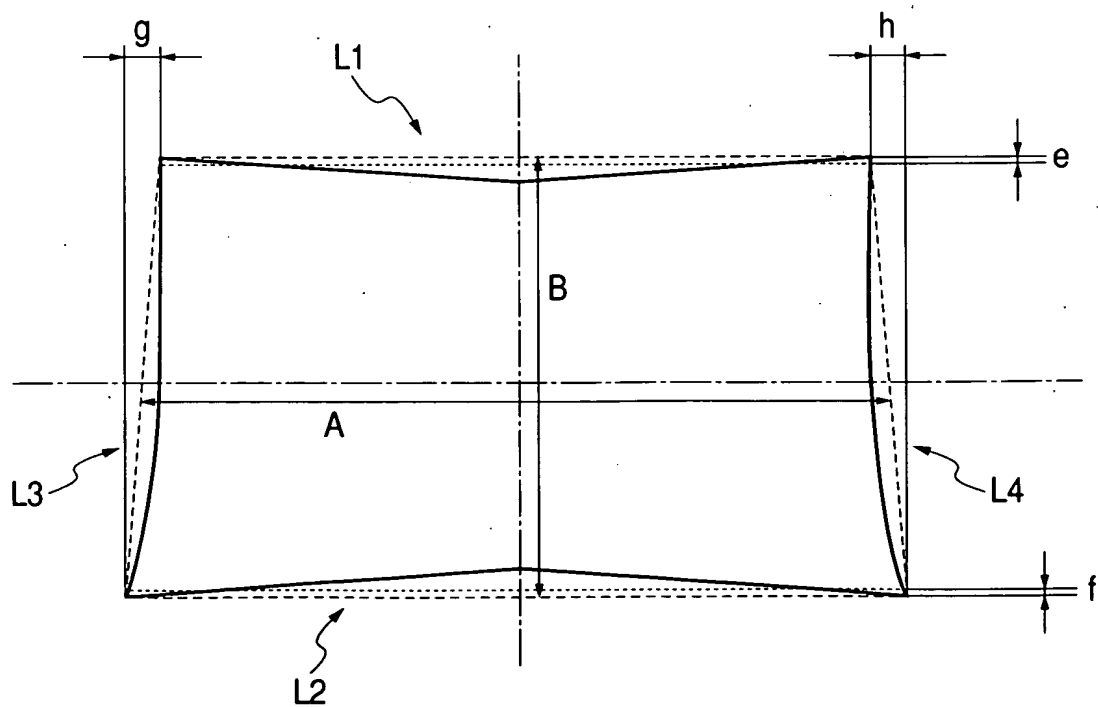
ASPHERICAL COEFFICIENT					
DEVICE	FIRST SCANNING LENS 5a'				K
SURFACE	LIGHT EMERGENCE SURFACE				3.3674E+00
	$\gamma^0$	$\gamma^2$	$\gamma^4$	$\gamma^6$	$\gamma^8$
$x^0$	0.0000E+00	-8.8805E-03	1.0608E-04	3.4862E-07	2.2660E-09
$x^2$	-6.1817E-03	1.2334E-04	-3.7014E-07	-3.7415E-09	0.0000E+00
$x^4$	-2.1866E-05	2.1179E-07	-7.2546E-10	0.0000E+00	0.0000E+00
$x^6$	-6.5104E-08	8.2409E-10	0.0000E+00	0.0000E+00	0.0000E+00
$x^8$	7.1489E-11	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

FIG. 5D

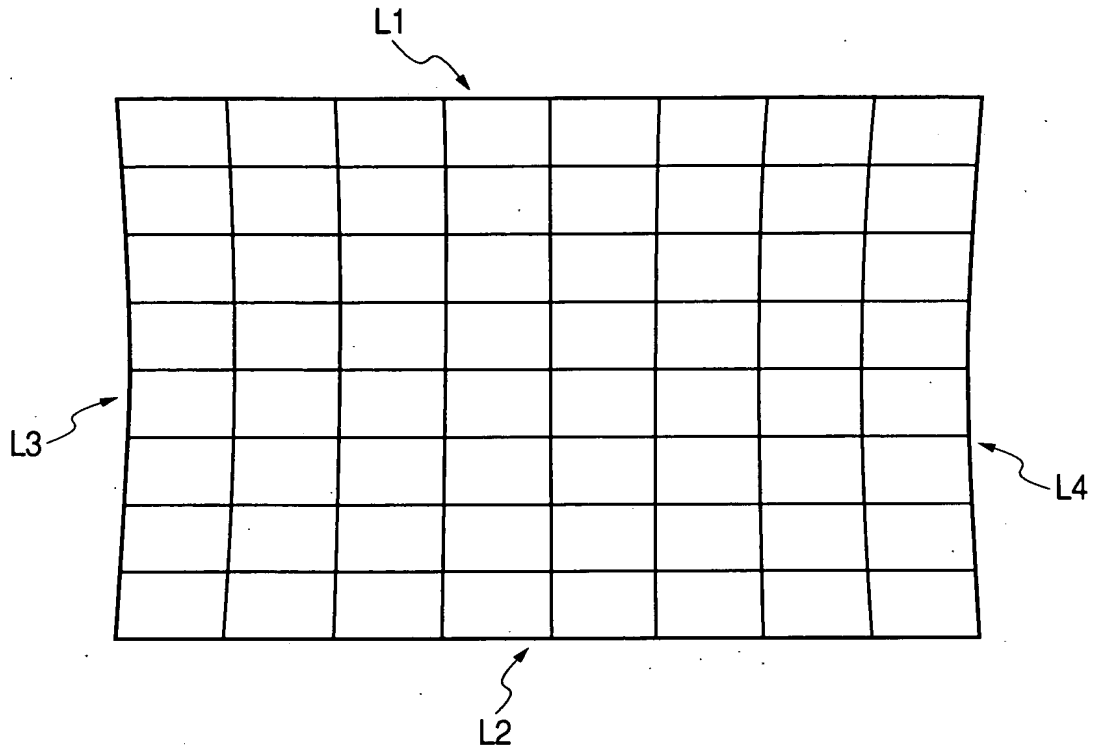
ASPHERICAL COEFFICIENT						
DEVICE	SECOND SCANNING LENS 5b'					K
SURFACE	INCIDENT SURFACE					8.7944E-01
	$\gamma^0$	$\gamma^2$	$\gamma^4$	$\gamma^6$	$\gamma^8$	$\gamma^{10}$
$X^0$	0.0000E+00	-7.9033E-03	-2.5900E-05	4.6536E-08	6.0897E-10	5.5563E-13
$X^2$	-5.6029E-04	-6.1477E-07	3.2752E-08	2.8149E-10	6.6453E-12	0.0000E+00
$X^4$	4.0844E-06	-1.5741E-08	1.4739E-10	-5.1325E-13	0.0000E+00	0.0000E+00
$X^6$	-2.3846E-09	2.4979E-12	-1.4764E-13	0.0000E+00	0.0000E+00	0.0000E+00
$X^8$	-2.9666E-13	1.8946E-14	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
$X^{10}$	-2.2325E-16	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

FIG. 5E

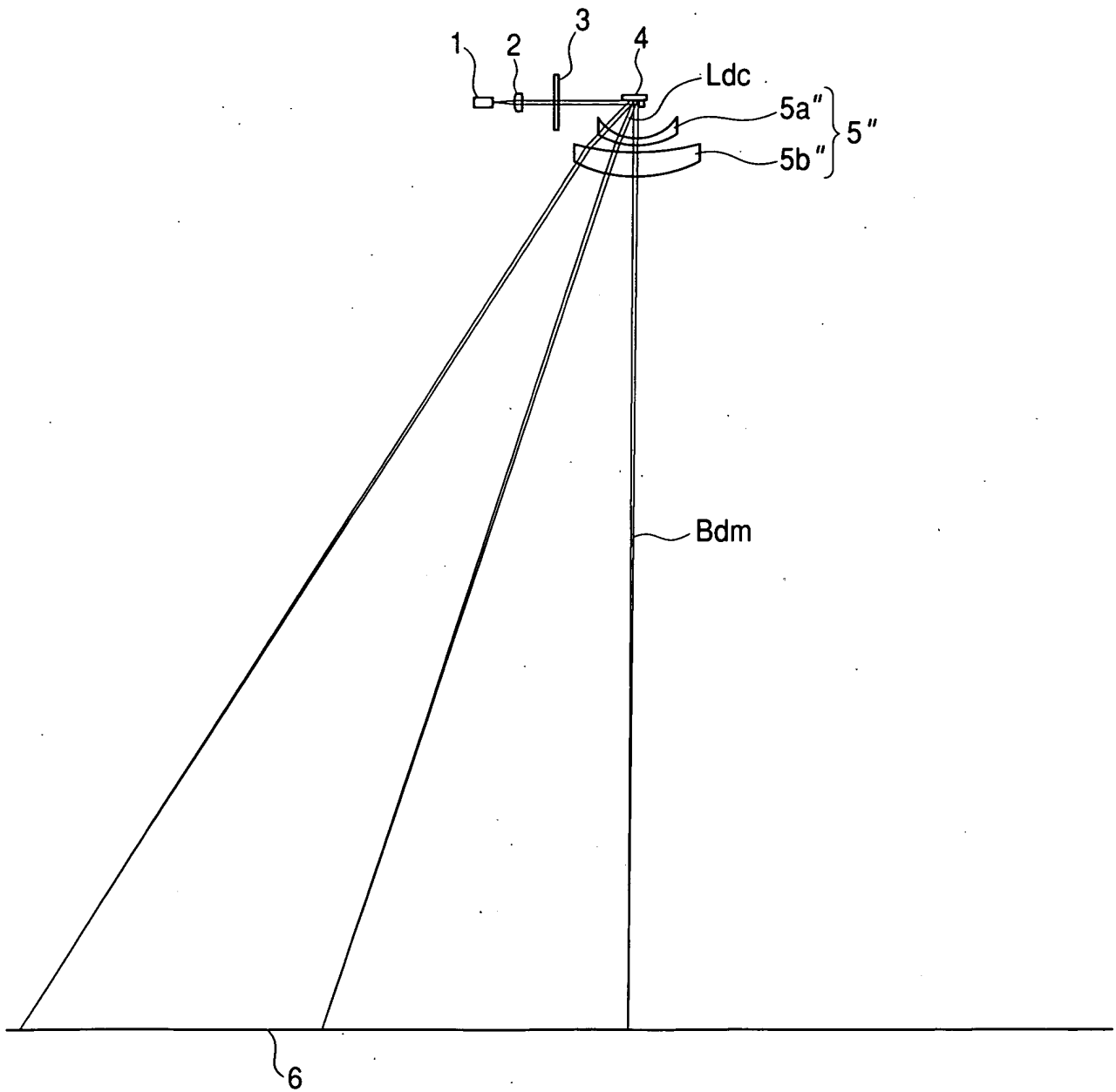
ASPHERICAL COEFFICIENT						
DEVICE	SECOND SCANNING LENS 5b'					K
SURFACE	LIGHT EMERGENCE SURFACE					1.1223E+00
	$\gamma^0$	$\gamma^2$	$\gamma^4$	$\gamma^6$	$\gamma^8$	$\gamma^{10}$
$X^0$	0.0000E+00	-2.6639E-03	-1.7603E-05	1.8446E-08	-1.1943E-10	-4.1606E-14
$X^2$	-3.1540E-04	-8.5071E-06	2.2095E-08	6.8159E-11	6.2392E-13	0.0000E+00
$X^4$	-5.8311E-06	-9.8501E-10	-5.5316E-11	-2.0112E-13	0.0000E+00	0.0000E+00
$X^6$	7.9053E-09	-2.6452E-12	2.7772E-14	0.0000E+00	0.0000E+00	0.0000E+00
$X^8$	-4.4063E-12	-1.2391E-15	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
$X^{10}$	6.4081E-16	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

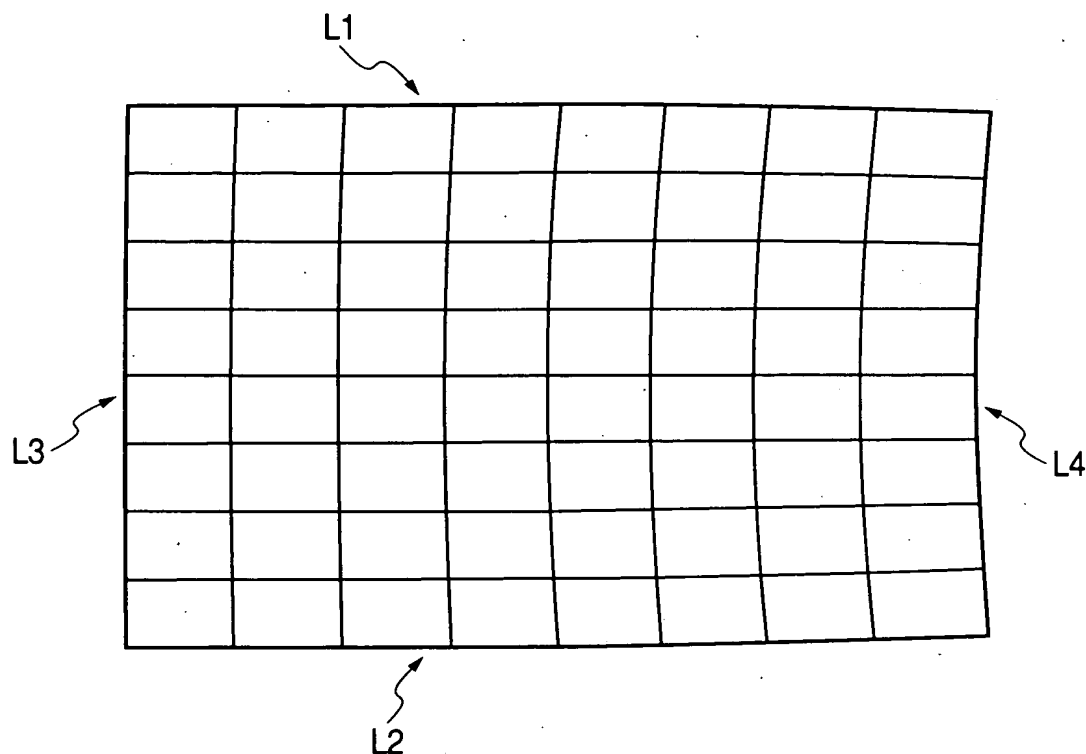
**FIG. 6A****FIG. 6B**



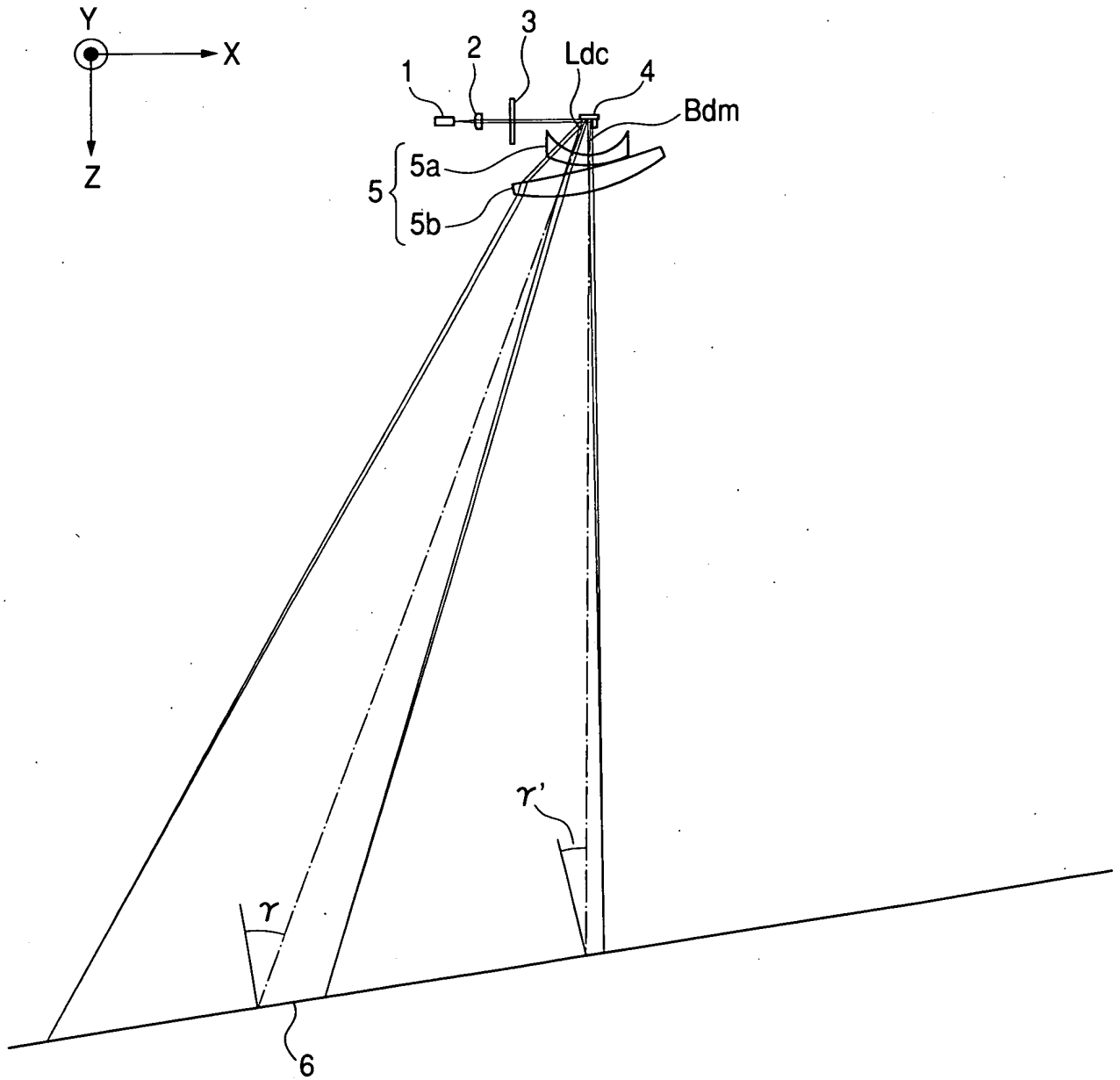
**FIG. 7****FIG. 8**

TV DISTORTION		TRAPEZOID DISTORTION	
UPPER SIDE	0.121 (%)	UPPER SIDE	0.000 (%)
LOWER SIDE	-0.121 (%)	LOWER SIDE	0.000 (%)
LEFT SIDE	1.533 (%)	LEFT SIDE	0.000 (%)
RIGHT SIDE	-1.533 (%)	RIGHT SIDE	0.000 (%)

**FIG. 9**

**FIG. 10****FIG. 11**

TV DISTORTION		TRAPEZOID DISTORTION	
UPPER SIDE	0.900 (%)	UPPER SIDE	1.021 (%)
LOWER SIDE	-0.900 (%)	LOWER SIDE	1.021 (%)
LEFT SIDE	0.000 (%)	LEFT SIDE	0.000 (%)
RIGHT SIDE	-1.702 (%)	RIGHT SIDE	0.000 (%)

**FIG. 12**

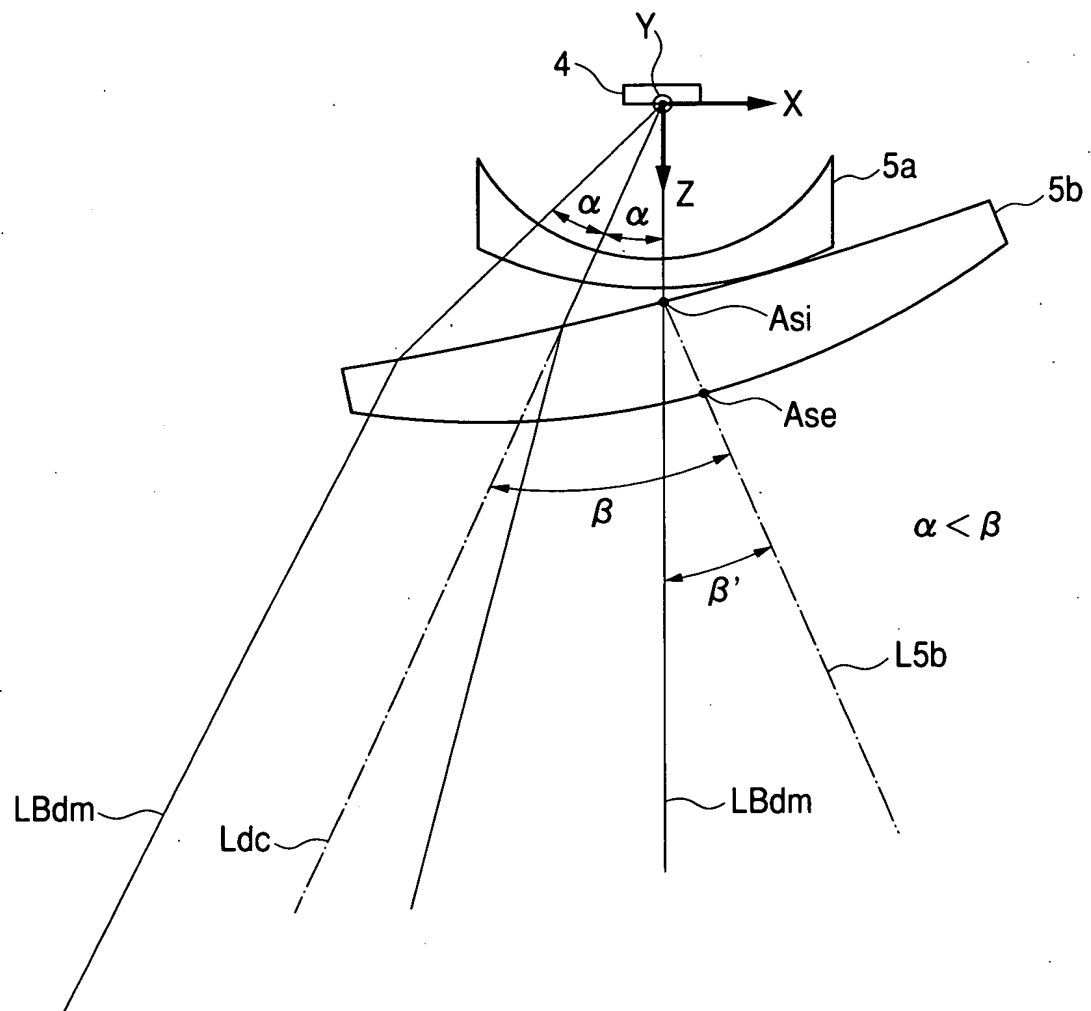
**FIG. 13**

FIG. 14A

OPTICAL SYSTEM												
OPTICAL SURFACE		RADIUS OF CURVATURE	SURFACE SEPARATION	POSITION OF SURFACE VERTEX			TILT OF NORMAL TO SURFACE		REFRACTIVE INDEX	DISPERSION		
DEVICE	SURFACE	Y RADIUS OF CURVATURE	SURFACE SEPARATION	POSITION Z	POSITION X	POSITION Y	TILT ZX	TILT ZY	Nd	$\nu_d$		
		(mm)	(mm)	(mm)	(mm)	(mm)	(deg)	(deg)				
DEFLECTING UNIT 4	REFLECTING SURFACE		20.288	0.000	0.000	0.000						
FIRST SCANNING LENS 5a	INCIDENT SURFACE	-63.8275	3.000	20.288	0.000	0.000	0.000	0.000	1.53064	55.5		
	LIGHT EMERGENCE SURFACE	-93.3323	2.000	23.288	0.000	0.000	0.000	0.000				
SECOND SCANNING LENS 5b	INCIDENT SURFACE	-121.5431	12.712	25.288	0.000	0.000	15.561	0.000	1.53064	55.5		
	LIGHT EMERGENCE SURFACE	-78.8558	417.508	38.000	3.540	0.000	15.561	0.000				
SURFACE TO BE SCANNED 6				455.508	8.426	0.000	10.134	0.000				

FIG. 14B

ASPHERICAL COEFFICIENT					
DEVICE	FIRST SCANNING LENS 5a				K
SURFACE	INCIDENT SURFACE				-2.3031E+00
	$\gamma^0$	$\gamma^2$	$\gamma^4$	$\gamma^6$	$\gamma^8$
$x^0$	0.0000E+00	8.9907E-04	1.1848E-04	4.0591E-07	-2.9912E-09
$x^2$	-4.7842E-03	7.4447E-05	-4.1490E-07	-9.1047E-10	0.0000E+00
$x^4$	-6.9854E-05	6.4756E-07	-5.6615E-09	0.0000E+00	0.0000E+00
$x^6$	-3.4655E-08	2.5051E-09	0.0000E+00	0.0000E+00	0.0000E+00
$x^8$	-1.2845E-10	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

FIG. 14C

ASPHERICAL COEFFICIENT					
DEVICE	FIRST SCANNING LENS 5a				K
SURFACE	LIGHT EMERGENCE SURFACE				-9.9922E+00
	$\gamma^0$	$\gamma^2$	$\gamma^4$	$\gamma^6$	$\gamma^8$
$x^0$	0.0000E+00	-1.2594E-02	9.6063E-05	3.2645E-07	5.2057E-10
$x^2$	-6.1191E-03	1.2948E-04	-2.7195E-07	-2.5534E-09	0.0000E+00
$x^4$	-2.2681E-00	1.8864E-07	-1.1439E-09	0.0000E+00	0.0000E+00
$x^6$	-6.6590E-08	9.0531E-10	0.0000E+00	0.0000E+00	0.0000E+00
$x^8$	7.5080E-11	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

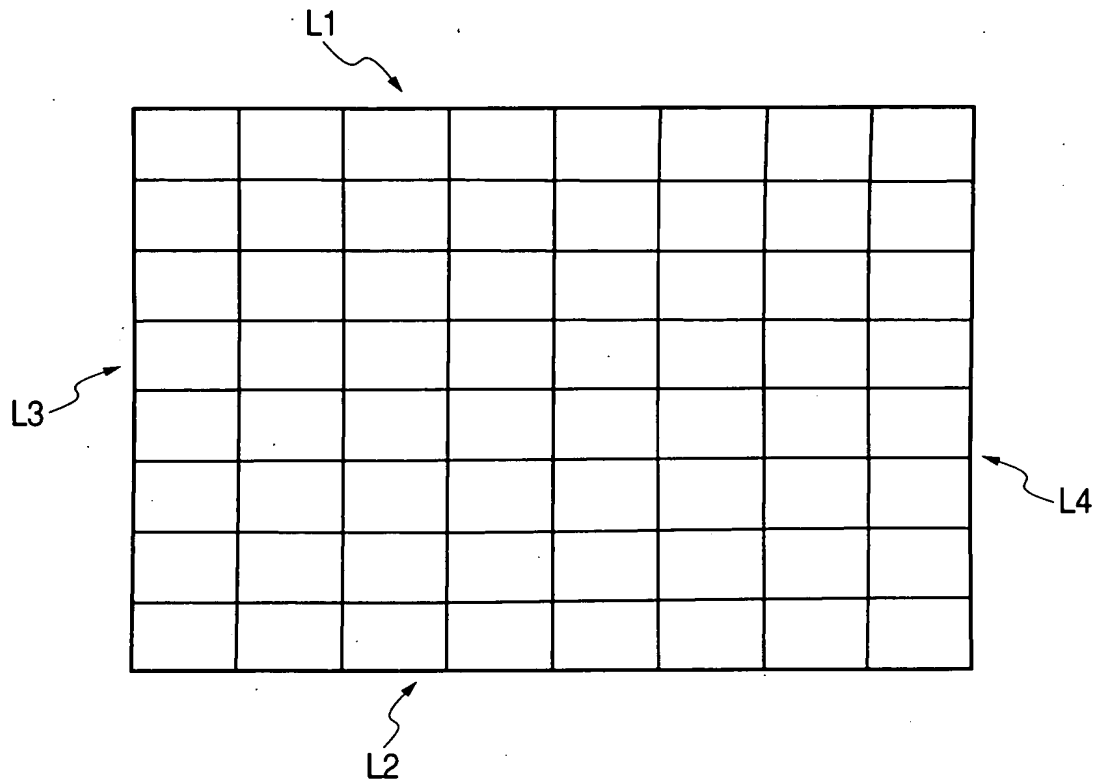
FIG. 14D

ASPHERICAL COEFFICIENT						
DEVICE	SECOND SCANNING LENS 5b					K
SURFACE	INCIDENT SURFACE					8.7944E-01
	$Y^0$	$Y^2$	$Y^4$	$Y^6$	$Y^8$	$Y^{10}$
$X^0$	0.0000E+00	-1.2929E-02	-3.9672E-05	-2.4341E-08	6.5352E-10	3.0567E-12
$X^2$	-3.3604E-04	-1.0658E-05	-2.2548E-08	3.3417E-11	8.6494E-13	0.0000E+00
$X^4$	5.2175E-06	-1.1900E-08	8.2217E-11	-1.9087E-13	0.0000E+00	0.0000E+00
$X^6$	-1.8294E-09	8.7846E-12	-2.8013E-14	0.0000E+00	0.0000E+00	0.0000E+00
$X^8$	2.6515E-15	-9.9952E-16	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
$X^{10}$	1.0610E-16	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

FIG. 14E

ASPHERICAL COEFFICIENT						
DEVICE	SECOND SCANNING LENS 5b					K
SURFACE	LIGHT EMERGENCE SURFACE					2.2545E-01
	$Y^0$	$Y^2$	$Y^4$	$Y^6$	$Y^8$	$Y^{10}$
$X^0$	0.0000E+00	-1.0930E-03	-1.4592E-05	3.0157E-08	-8.5957E-11	4.1395E-13
$X^2$	-4.1889E-04	-2.2205E-05	-8.9921E-09	2.1539E-11	-4.1669E-14	0.0000E+00
$X^4$	-4.9253E-06	1.9010E-09	-1.6464E-11	-1.5503E-13	0.0000E+00	0.0000E+00
$X^6$	8.5327E-09	-3.3855E-12	7.4694E-15	0.0000E+00	0.0000E+00	0.0000E+00
$X^8$	-4.1149E-12	1.6041E-15	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
$X^{10}$	6.9470E-16	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00



*FIG. 15**FIG. 16*

TV DISTORTION		TRAPEZOID DISTORTION	
UPPER SIDE	0.148 (%)	UPPER SIDE	0.045 (%)
LOWER SIDE	-0.148 (%)	LOWER SIDE	0.045 (%)
LEFT SIDE	0.266 (%)	LEFT SIDE	0.000 (%)
RIGHT SIDE	-0.037 (%)	RIGHT SIDE	0.000 (%)

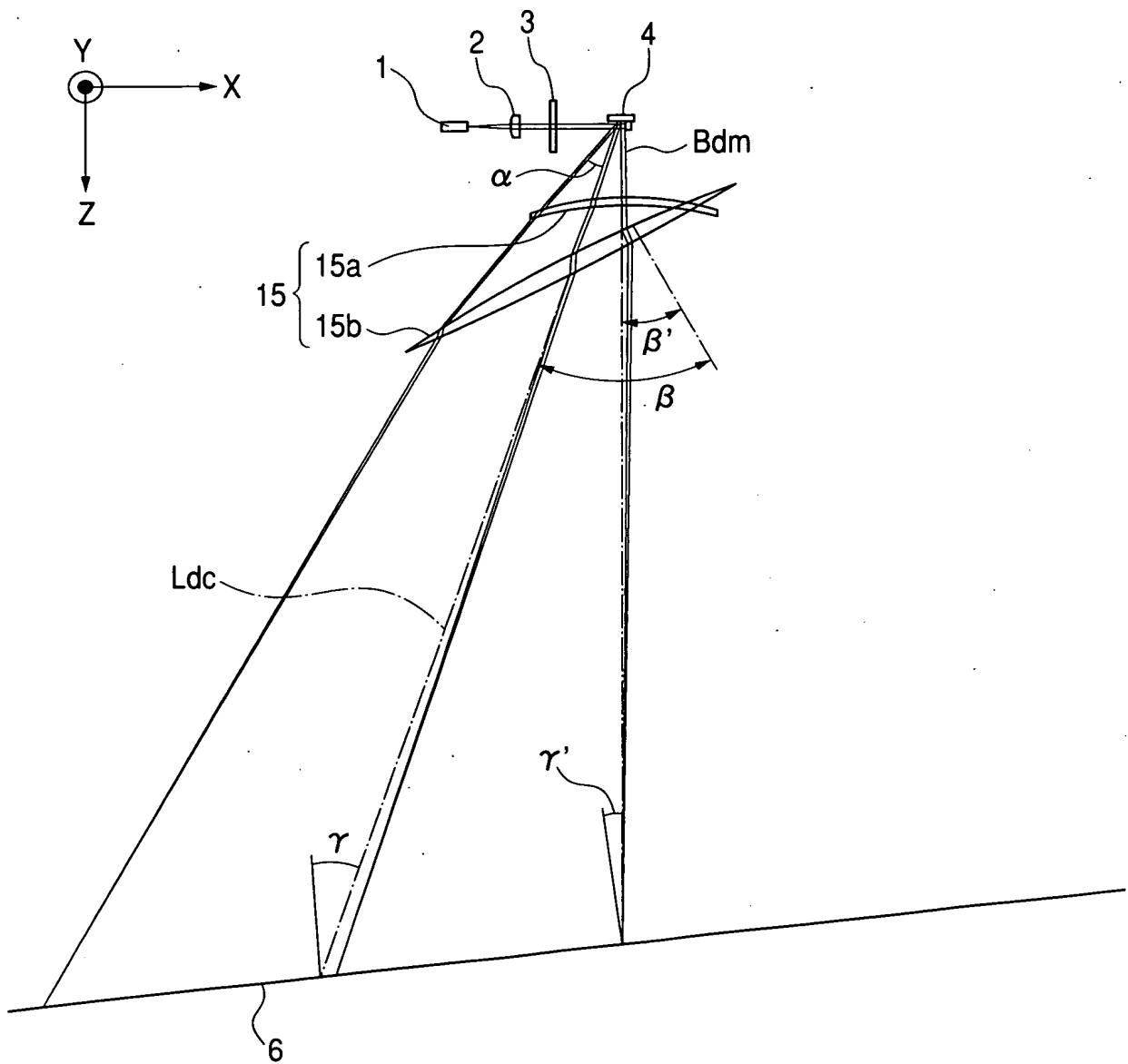
**FIG. 17**

FIG. 18A

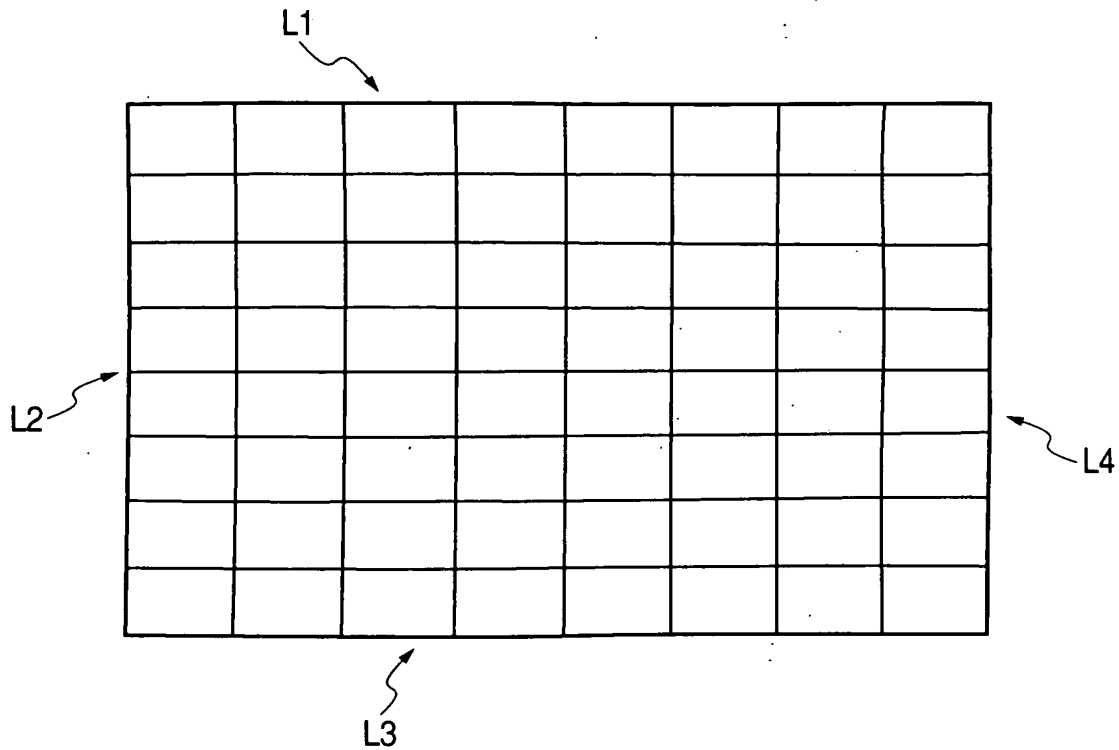
OPTICAL SYSTEM											
OPTICAL SURFACE		RADIUS OF CURVATURE (mm)	SURFACE SEPARATION (mm)	POSITION OF SURFACE VERTEX			TILT OF NORMAL TO SURFACE		REFRACTIVE INDEX	DISPERSION	
DEVICE	SURFACE			Y RADIUS OF CURVATURE (mm)	SURFACE SEPARATION (mm)	POSITION Z (mm)	POSITION X (mm)	POSITION Y (mm)			TILT ZX (deg)
DEFLECTING UNIT 4	REFLECTING SURFACE		39.860		0.000	0.000	0.000				
FIRST SCANNING LENS 15a	INCIDENT SURFACE	144.1589	3.000	39.860	0.000	0.000	0.000	0.000	0.000	1.75520	27.5
	LIGHT EMERGENCE SURFACE	153.0713	2.000	42.860	0.000	0.000	0.000	0.000	0.000		
SECOND SCANNING LENS 15b	INCIDENT SURFACE	180.5564	0.140	44.860	20.004	0.000	0.000	25.000	0.000	1.75520	27.5
	LIGHT EMERGENCE SURFACE	-199.8478	399.471	45.000	69.405	0.000	0.000	33.141	0.000		
SURFACE TO BE SCANNED 6				444.471	-0.296	0.000	0.000	6.835	0.000		

FIG. 18B

ASPHERICAL COEFFICIENT					
DEVICE	SECOND SCANNING LENS 15b				K
SURFACE	INCIDENT SURFACE				-2.1677E+00
	$\gamma^0$	$\gamma^2$	$\gamma^4$	$\gamma^6$	$\gamma^8$
$x^0$	0.0000E+00	-1.1493E-02	3.7211E-07	0.0000E+00	0.0000E+00
$x^2$	4.7398E-04	-4.4403E-08	0.0000E+00	0.0000E+00	0.0000E+00
$x^4$	-2.8232E-09	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
$x^6$	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
$x^8$	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

FIG. 18C

ASPHERICAL COEFFICIENT					
DEVICE	SECOND SCANNING LENS 15b				K
SURFACE	LIGHT EMERGENCE SURFACE				-6.0053E-01
	$\gamma^0$	$\gamma^2$	$\gamma^4$	$\gamma^6$	$\gamma^8$
$x^0$	0.0000E+00	-7.8454E-03	-4.6779E-07	0.0000E+00	0.0000E+00
$x^2$	2.0545E-03	-1.0375E-07	0.0000E+00	0.0000E+00	0.0000E+00
$x^4$	1.2955E-08	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
$x^6$	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
$x^8$	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

**FIG. 19****FIG. 20**

TV DISTORTION		TRAPEZOID DISTORTION	
UPPER SIDE	0.163 (%)	UPPER SIDE	0.110 (%)
LOWER SIDE	-0.163 (%)	LOWER SIDE	0.110 (%)
LEFT SIDE	0.194 (%)	LEFT SIDE	0.000 (%)
RIGHT SIDE	-0.106 (%)	RIGHT SIDE	0.000 (%)

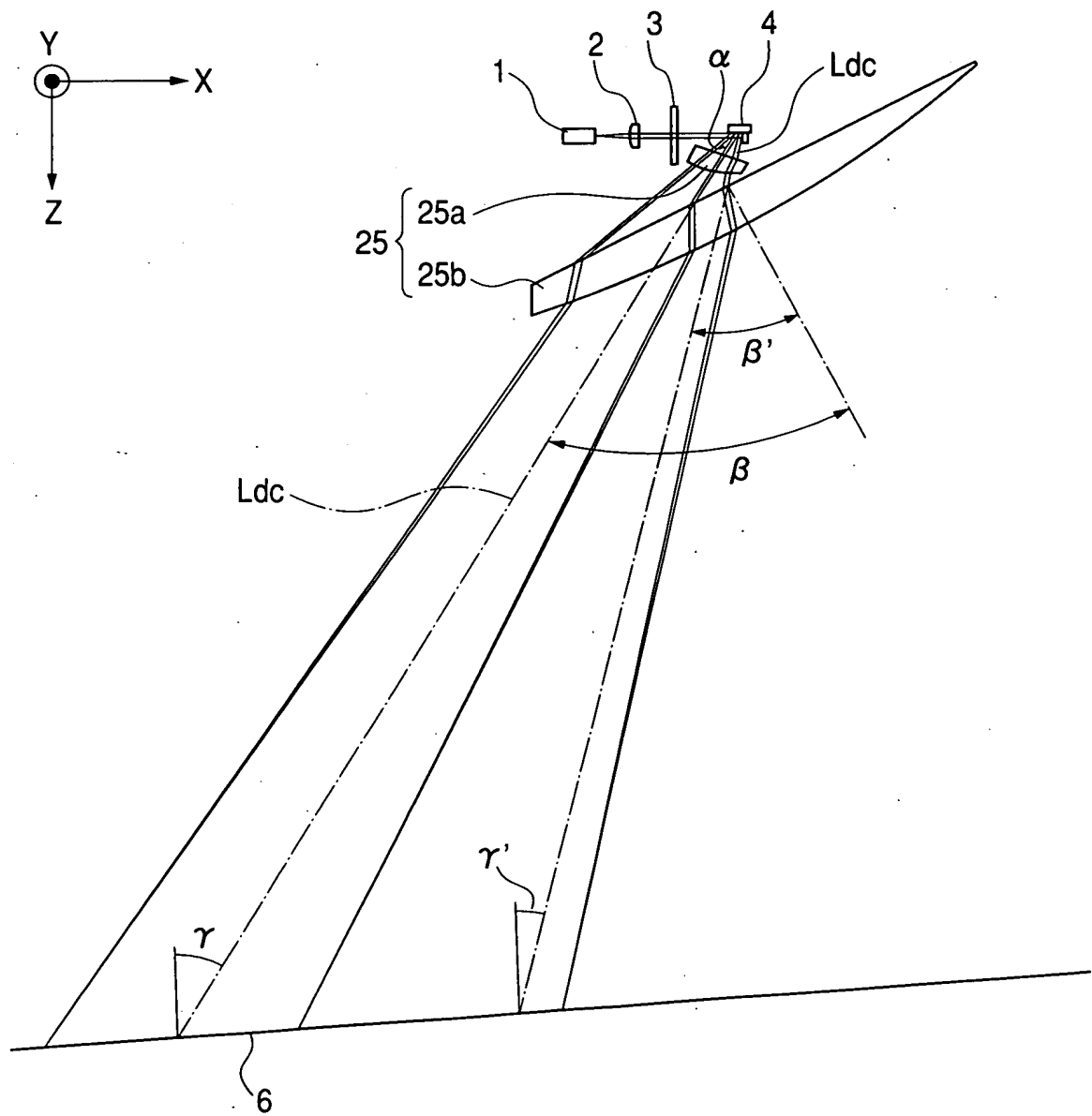
**FIG. 21**

FIG. 22A

OPTICAL SYSTEM													
OPTICAL SURFACE		RADIUS OF CURVATURE	SURFACE SEPARATION	POSITION OF SURFACE VERTEX			TILT OF NORMAL TO SURFACE		REFRACTIVE INDEX	DISPERSION			
DEVICE	SURFACE	Y RADIUS OF CURVATURE	SURFACE SEPARATION	POSITION Z	POSITION X	POSITION Y	TILT ZX	TILT ZY	Nd	$\nu d$			
		(mm)	(mm)	(mm)	(mm)	(mm)	(deg)	(deg)					
DEFLECTING UNIT 4	REFLECTING SURFACE		19.471	0.000									
FIRST SCANNING LENS 25a	INCIDENT SURFACE	-59.2564	0.140	19.471	32.136	0.000	0.000	0.000	1.48749	70.4			
	LIGHT EMERGENCE SURFACE	-56.7891	0.140	19.611	6.104	0.000	0.000	0.000					
SECOND SCANNING LENS 25b	INCIDENT SURFACE	177.3642	0.700	19.751	13.353	0.000	30.000	0.000	1.74330	49.2			
	LIGHT EMERGENCE SURFACE	-202.4853	535.957	20.451	149.086	0.000	47.218	0.000					
SURFACE TO BE SCANNED 6				556.408	-88.835	0.000	4.961	0.000					

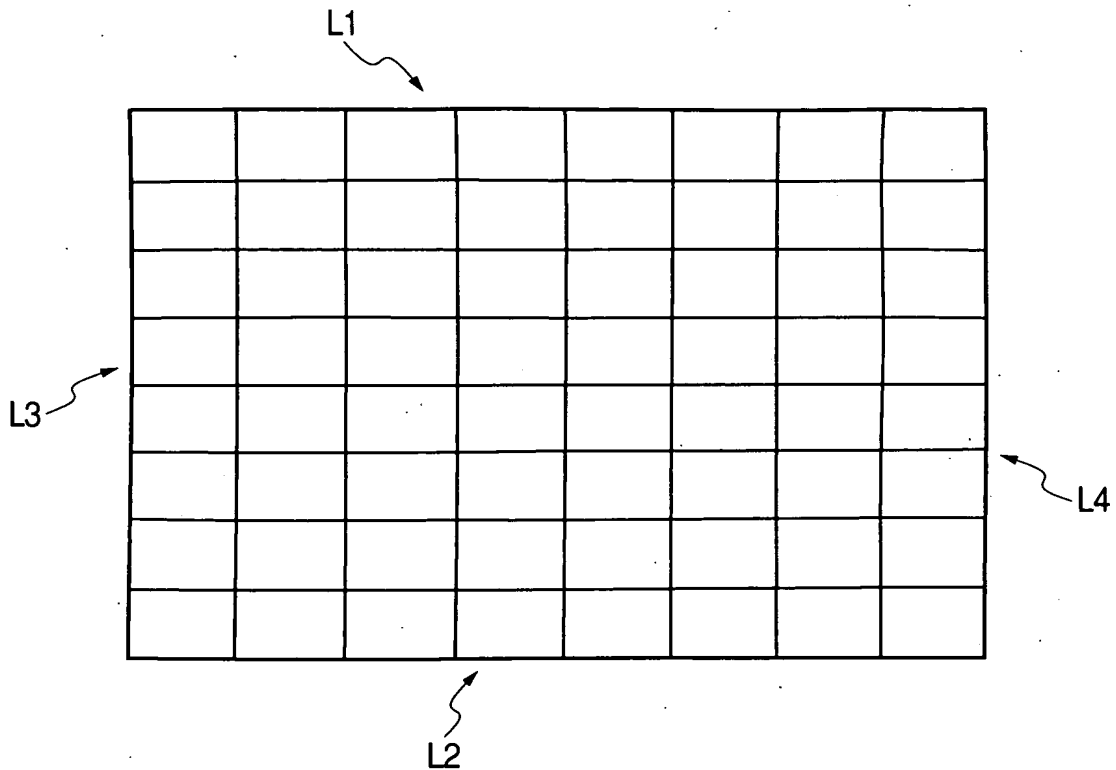
*FIG. 22B*

ASPHERICAL COEFFICIENT					
DEVICE	SECOND SCANNING LENS 25b				K
SURFACE	INCIDENT SURFACE				-9.8701E+00
	$\gamma^0$	$\gamma^2$	$\gamma^4$	$\gamma^6$	$\gamma^8$
$x^0$	0.0000E+00	-7.1559E-03	8.6088E-08	0.0000E+00	0.0000E+00
$x^2$	-6.5182E-04	4.4616E-08	0.0000E+00	0.0000E+00	0.0000E+00
$x^4$	2.3774E-09	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
$x^6$	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
$x^8$	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

*FIG. 22C*

ASPHERICAL COEFFICIENT					
DEVICE	SECOND SCANNING LENS 25b				K
SURFACE	LIGHT EMERGENCE SURFACE				-9.9096E-01
	$\gamma^0$	$\gamma^2$	$\gamma^4$	$\gamma^6$	$\gamma^8$
$x^0$	0.0000E+00	-2.7111E-03	-2.8962E-07	0.0000E+00	0.0000E+00
$x^2$	1.6414E+00	-3.8837E-08	0.0000E+00	0.0000E+00	0.0000E+00
$x^4$	-9.3506E-10	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
$x^6$	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
$x^8$	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00



*FIG. 23**FIG. 24*

TV DISTORTION		TRAPEZOID DISTORTION	
UPPER SIDE	0.037 (%)	UPPER SIDE	-0.010 (%)
LOWER SIDE	-0.037 (%)	LOWER SIDE	-0.010 (%)
LEFT SIDE	0.064 (%)	LEFT SIDE	0.000 (%)
RIGHT SIDE	-0.111 (%)	RIGHT SIDE	0.000 (%)

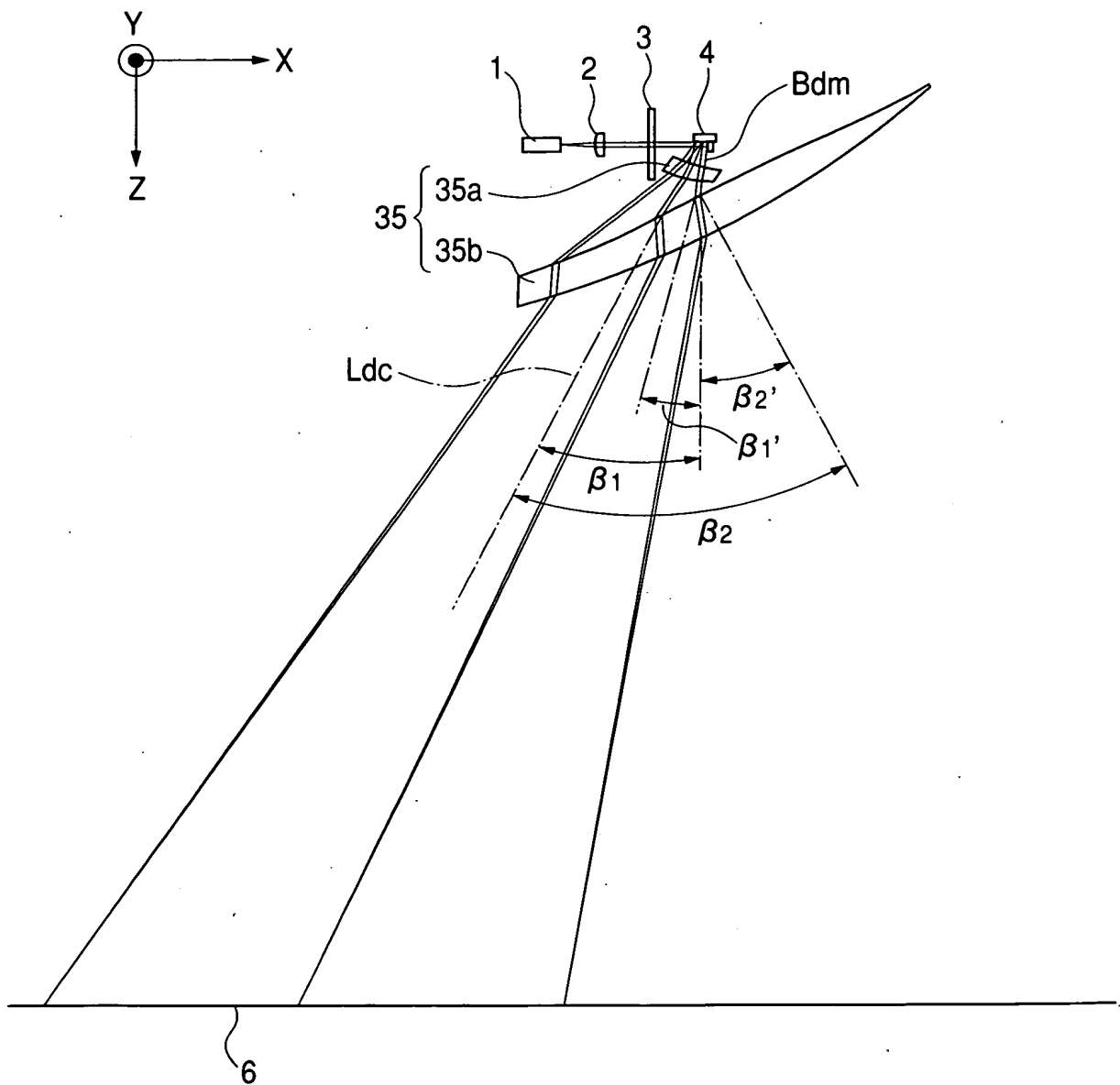
**FIG. 25**

FIG. 26A

OPTICAL SYSTEM									
OPTICAL SURFACE	RADIUS OF CURVATURE	SURFACE SEPARATION	POSITION OF SURFACE VERTEX			TILT OF NORMAL TO SURFACE		REFRACTIVE INDEX	DISPERSION
DEVICE	Y RADIUS OF CURVATURE	SURFACE SEPARATION	POSITION Z	POSITION X	POSITION Y	TILT ZX	TILT ZY	Nd	$\nu_d$
	(mm)	(mm)	(mm)	(mm)	(mm)	(deg)	(deg)		
DEFLECTING UNIT 4		16.489	0.000						
FIRST SCANNING LENS 35a	INCIDENT SURFACE	-105.7343	16.489	27.222	0.000	7.471	0.000	1.48749	70.4
	LIGHT EMERGENCE SURFACE	-278.2567	16.649	-6.940	0.000	-1.813	0.000		
SECOND SCANNING LENS 35b	INCIDENT SURFACE	83.4333	16.749	11.342	0.000	28.187	0.000	1.74330	49.2
	LIGHT EMERGENCE SURFACE	-183.4301	17.449	119.730	0.000	48.187	0.000		
SURFACE TO BE SCANNED 6			517.304	-68.625	0.000	0.000	0.000		

*FIG. 26B*

ASPHERICAL COEFFICIENT					
DEVICE	FIRST SCANNING LENS 35a				K
SURFACE	INCIDENT SURFACE				-4.3379E+00
	$\gamma^0$	$\gamma^2$	$\gamma^4$	$\gamma^6$	$\gamma^8$
$x^0$	0.0000E+00	4.4406E-03	2.0695E-05	0.0000E+00	0.0000E+00
$x^2$	-6.4421E-03	1.0958E-05	0.0000E+00	0.0000E+00	0.0000E+00
$x^4$	2.3784E-07	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
$x^6$	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
$x^8$	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

*FIG. 26C*

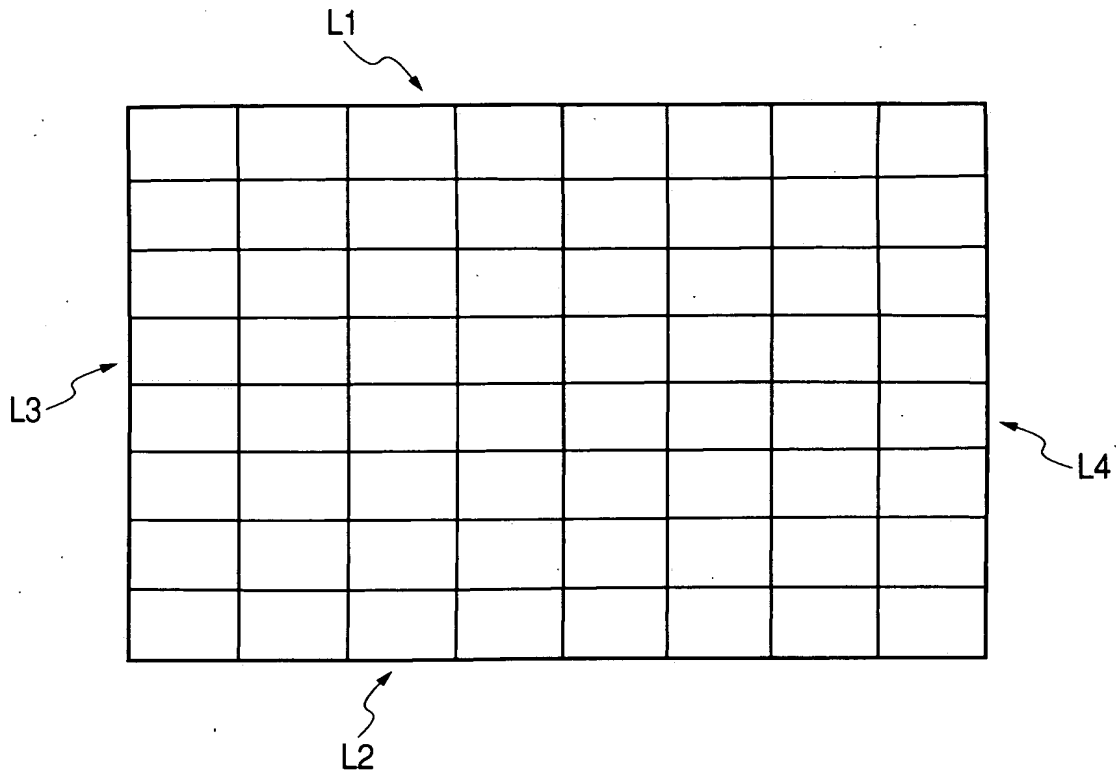
ASPHERICAL COEFFICIENT					
DEVICE	FIRST SCANNING LENS 35a				K
SURFACE	LIGHT EMERGENCE SURFACE				-7.5714E+01
	$\gamma^0$	$\gamma^2$	$\gamma^4$	$\gamma^6$	$\gamma^8$
$x^0$	0.0000E+00	-9.8325E-03	5.1377E-07	0.0000E+00	0.0000E+00
$x^2$	-9.0439E-04	7.0829E-08	0.0000E+00	0.0000E+00	0.0000E+00
$x^4$	4.1836E-09	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
$x^6$	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
$x^8$	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

*FIG. 26D*

ASPHERICAL COEFFICIENT					
DEVICE	SECOND SCANNING LENS 35b				K
SURFACE	INCIDENT SURFACE				-7.5714E+01
	$Y^0$	$Y^2$	$Y^4$	$Y^6$	$Y^8$
$X^0$	0.0000E+00	-9.8325E-03	5.1377E-07	0.0000E+00	0.0000E+00
$X^2$	-9.0439E-04	7.0829E-08	0.0000E+00	0.0000E+00	0.0000E+00
$X^4$	4.1836E-09	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
$X^6$	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
$X^8$	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

*FIG. 26E*

ASPHERICAL COEFFICIENT					
DEVICE	SECOND SCANNING LENS 35b				K
SURFACE	LIGHT EMERGENCE SURFACE				-9.5698E-01
	$Y^0$	$Y^2$	$Y^4$	$Y^6$	$Y^8$
$X^0$	0.0000E+00	-3.3817E-03	-7.0526E-07	0.0000E+00	0.0000E+00
$X^2$	1.5315E-03	-1.0305E-07	0.0000E+00	0.0000E+00	0.0000E+00
$X^4$	-1.3855E-09	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
$X^6$	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
$X^8$	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

**FIG. 27****FIG. 28**

TV DISTORTION		TRAPEZOID DISTORTION	
UPPER SIDE	0.058 (%)	UPPER SIDE	0.012 (%)
LOWER SIDE	-0.058 (%)	LOWER SIDE	0.012 (%)
LEFT SIDE	0.069 (%)	LEFT SIDE	0.000 (%)
RIGHT SIDE	-0.060 (%)	RIGHT SIDE	0.000 (%)

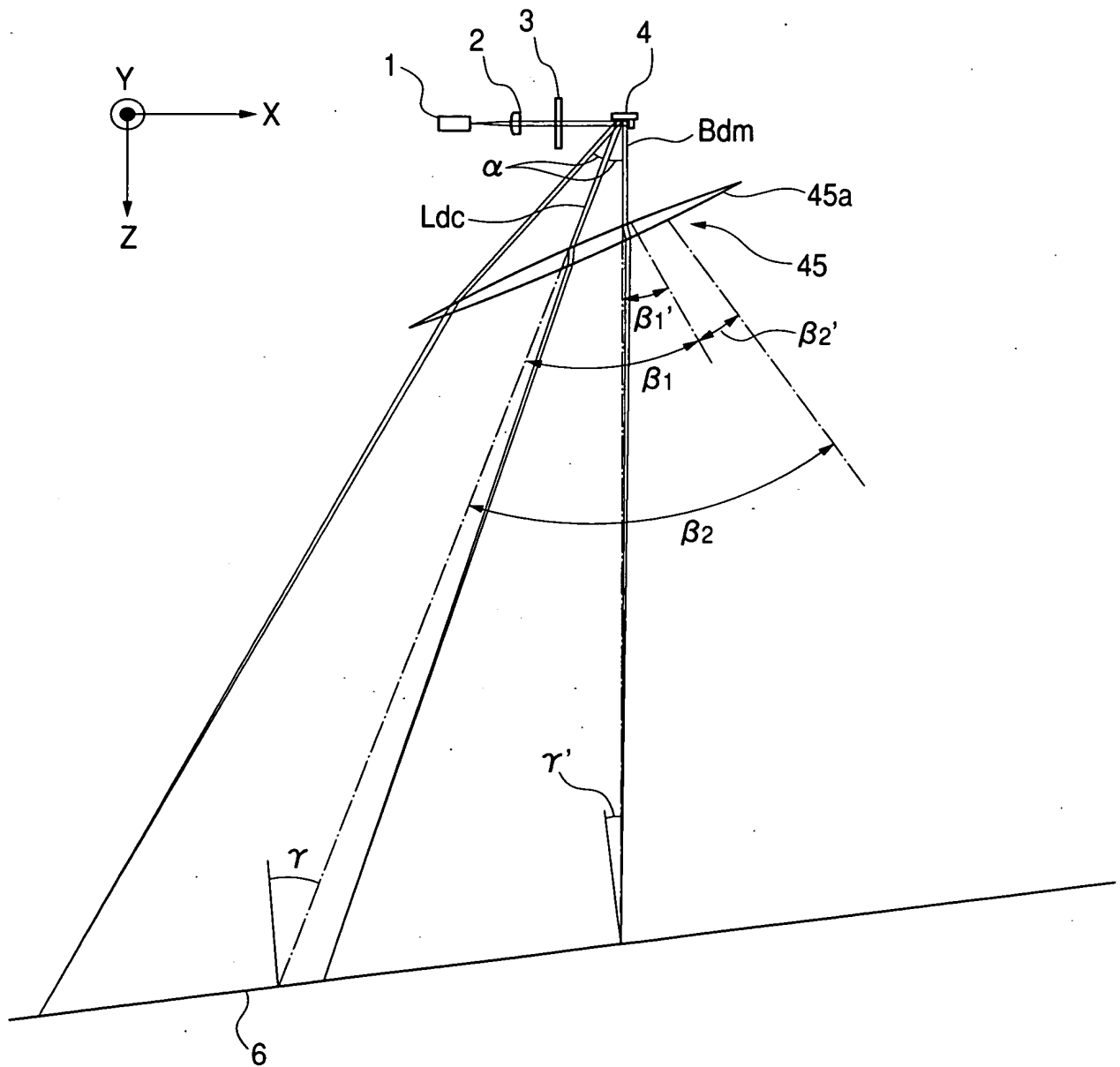
**FIG. 29**

FIG. 30A

OPTICAL SYSTEM										
OPTICAL SURFACE		RADIUS OF CURVATURE	SURFACE SEPARATION	POSITION OF SURFACE VERTEX			TILT OF NORMAL TO SURFACE		REFRACTIVE INDEX	DISPERSION
DEVICE	SURFACE	Y RADIUS OF CURVATURE (mm)	SURFACE SEPARATION (mm)	POSITION Z (mm)	POSITION X (mm)	POSITION Y (mm)	TILT ZX (deg)	TILT ZY (deg)	Nd	$\nu d$
DEFLECTING UNIT 4	REFLECTING SURFACE		49.860	0.000						
FIRST SCANNING LENS 45b	INCIDENT SURFACE	172.0144	0.140	49.860	12.932	0.000	25.000	0.000	1.75520	27.5
	LIGHT EMERGENCE SURFACE	-178.0748	402.084	50.000	68.349	0.000	36.040	0.000		
SURFACE TO BE SCANNED 6				452.084	1.457	0.000	8.421	0.000		

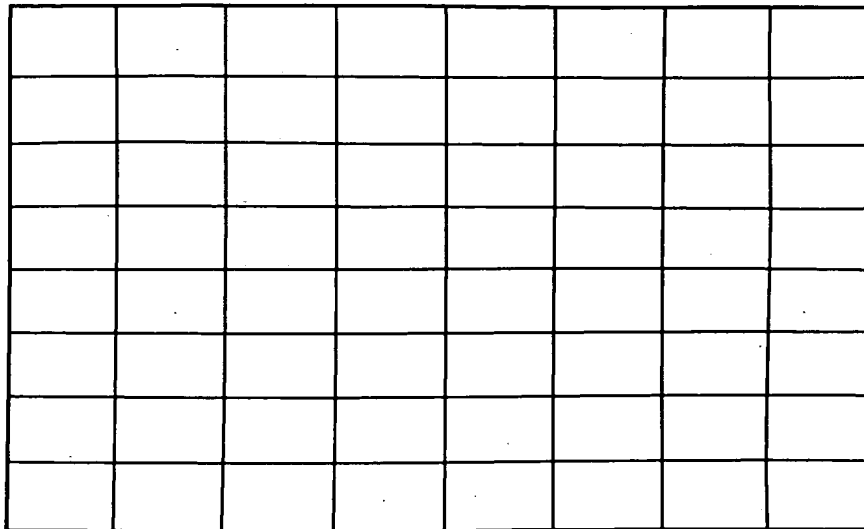


*FIG. 30B*

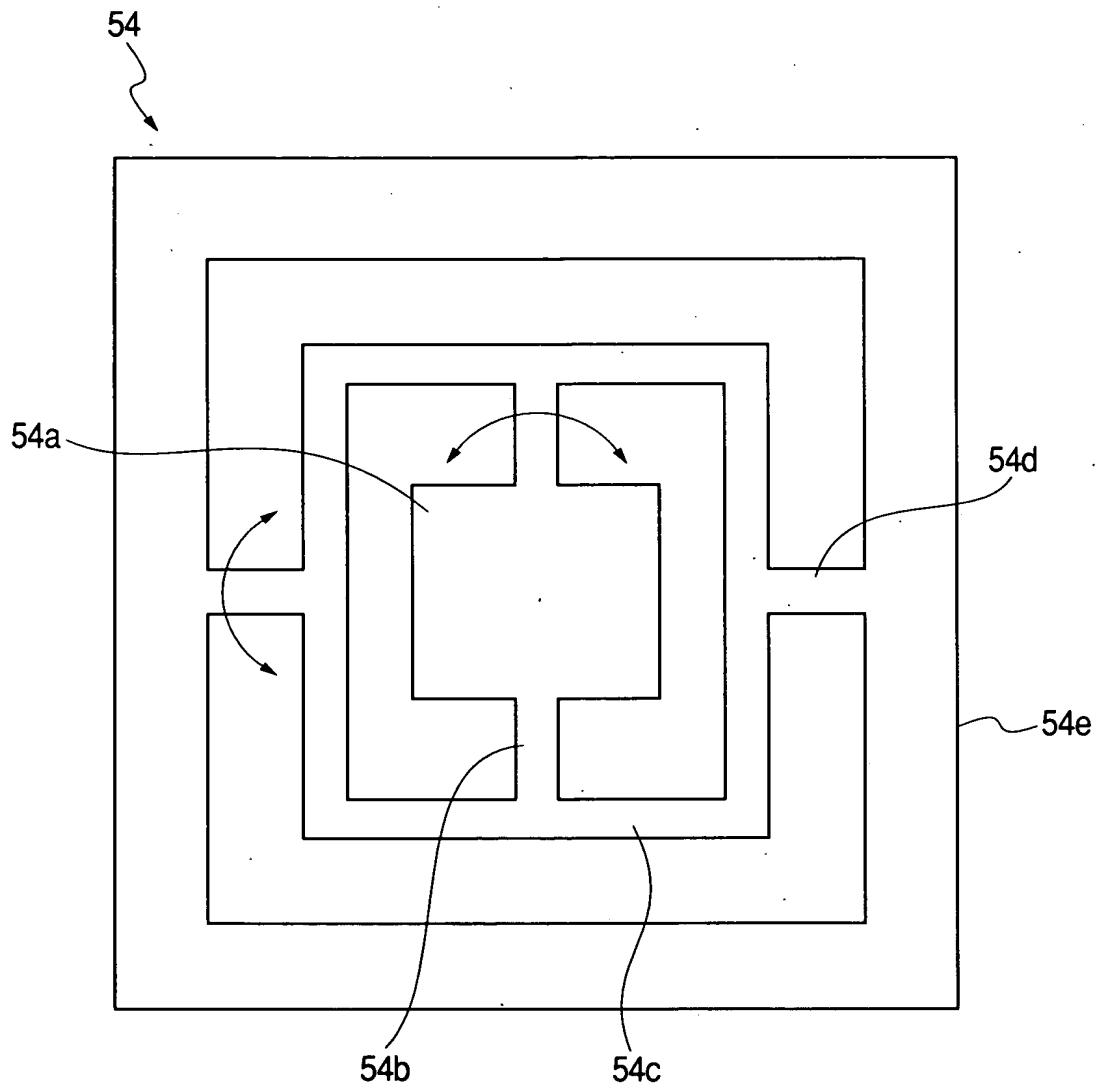
ASPHERICAL COEFFICIENT					
DEVICE	FIRST SCANNING LENS 45a				K
SURFACE	INCIDENT SURFACE				-9.6195E+02
	$\gamma^0$	$\gamma^2$	$\gamma^4$	$\gamma^6$	$\gamma^8$
$x^0$	0.0000E+00	-1.4038E-02	2.7472E-06	-3.1388E-10	0.0000E+00
$x^2$	3.0160E-04	-4.3890E-08	-2.3366E-11	0.0000E+00	0.0000E+00
$x^4$	-1.6218E-09	9.1459E-13	0.0000E+00	0.0000E+00	0.0000E+00
$x^6$	3.3836E-14	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
$x^8$	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

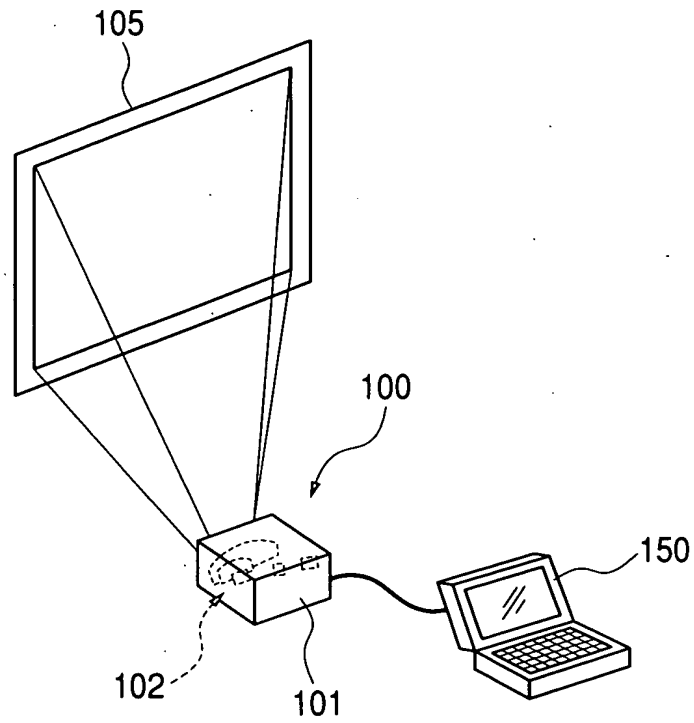
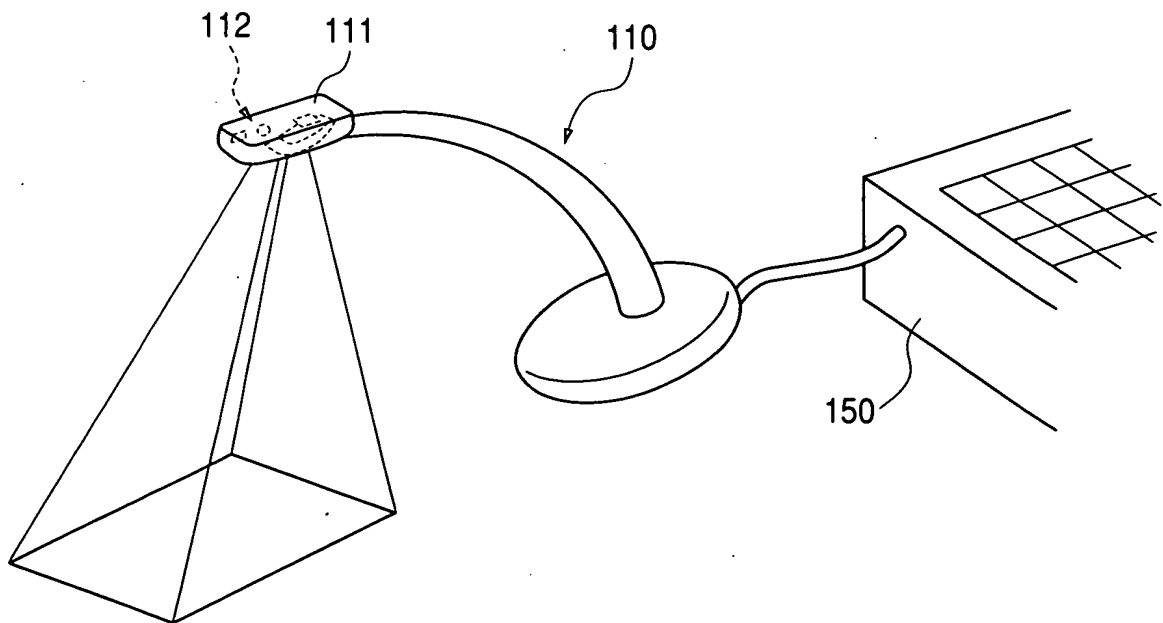
*FIG. 30C*

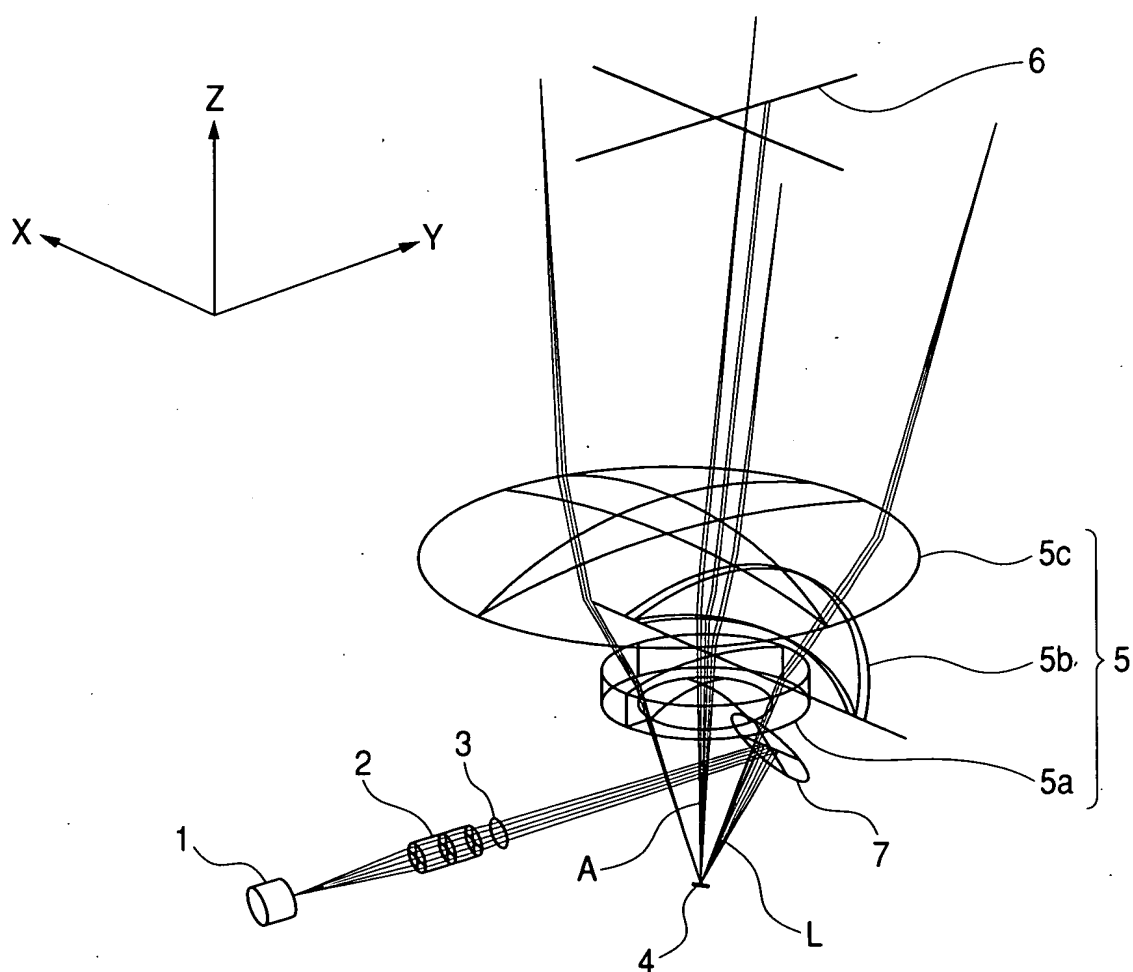
ASPHERICAL COEFFICIENT					
DEVICE	FIRST SCANNING LENS 45a				K
SURFACE	LIGHT EMERGENCE SURFACE				-7.0304E-01
	$\gamma^0$	$\gamma^2$	$\gamma^4$	$\gamma^6$	$\gamma^8$
$x^0$	0.0000E+00	-9.9320E-03	3.4709E-07	3.8799E-10	0.0000E+00
$x^2$	1.6734E-03	-1.3457E-07	-1.0293E-12	0.0000E+00	0.0000E+00
$x^4$	1.8684E-08	-1.4702E-12	0.0000E+00	0.0000E+00	0.0000E+00
$x^6$	-3.6730E-14	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
$x^8$	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

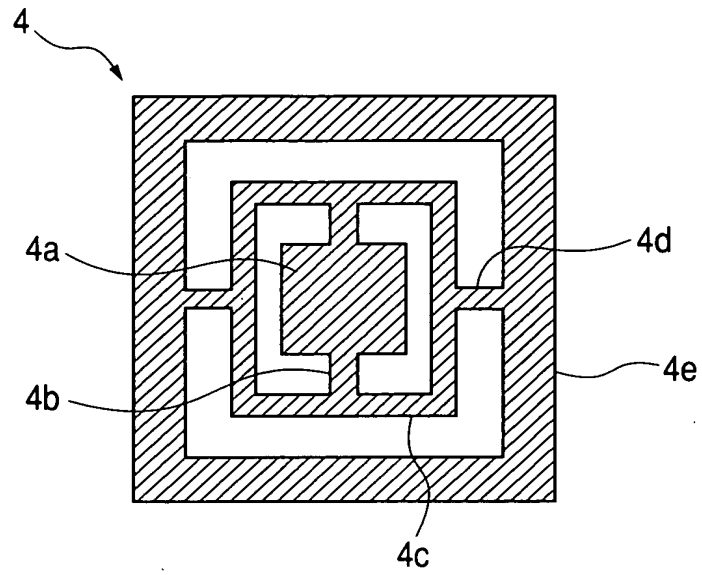
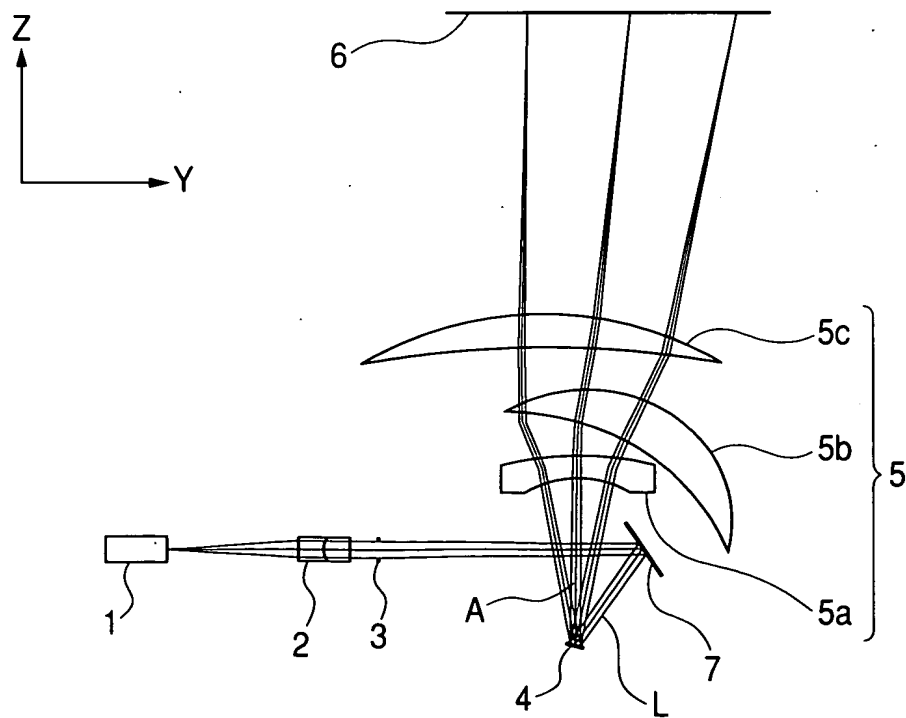
*FIG. 31**FIG. 32*

TV DISTORTION		TRAPEZOID DISTORTION	
UPPER SIDE	0.173 (%)	UPPER SIDE	0.097 (%)
LOWER SIDE	-0.173 (%)	LOWER SIDE	0.097 (%)
LEFT SIDE	0.132 (%)	LEFT SIDE	0.000 (%)
RIGHT SIDE	-0.198 (%)	RIGHT SIDE	0.000 (%)

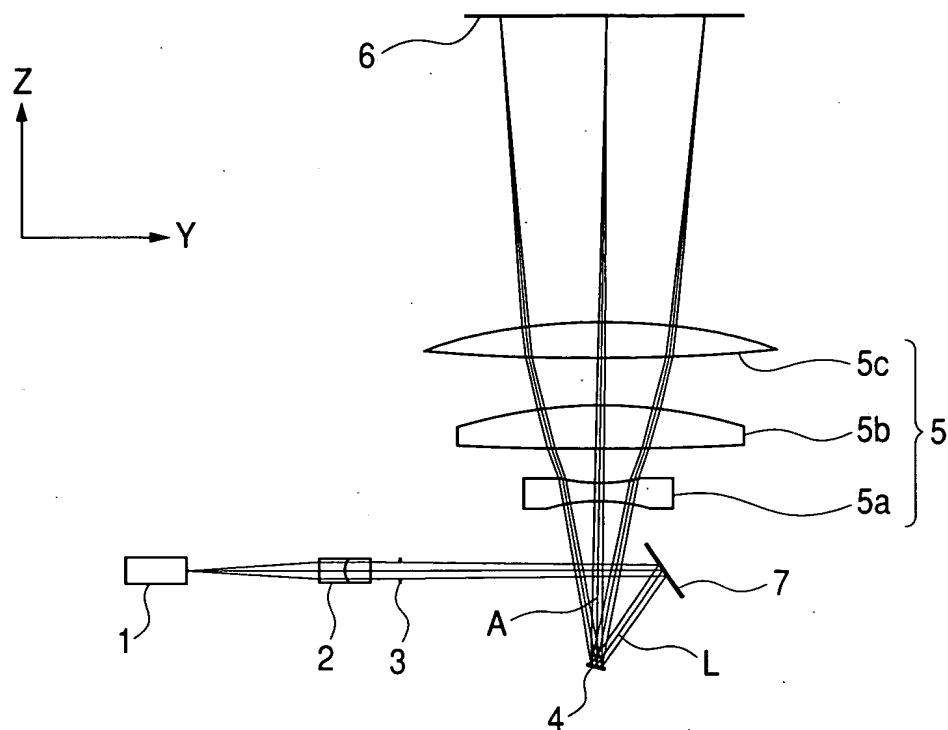
**FIG. 33**

*FIG. 34A**FIG. 34B*

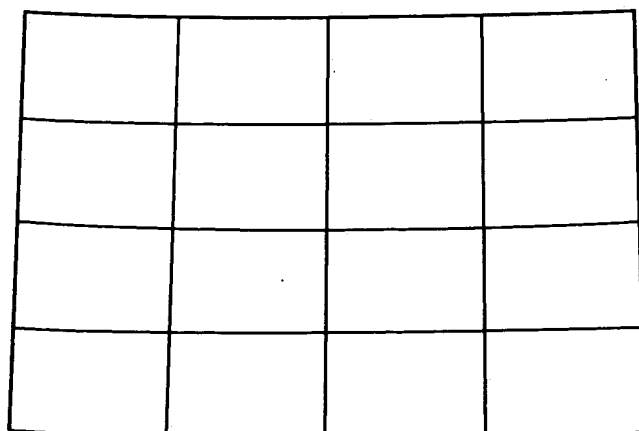
*FIG. 35*

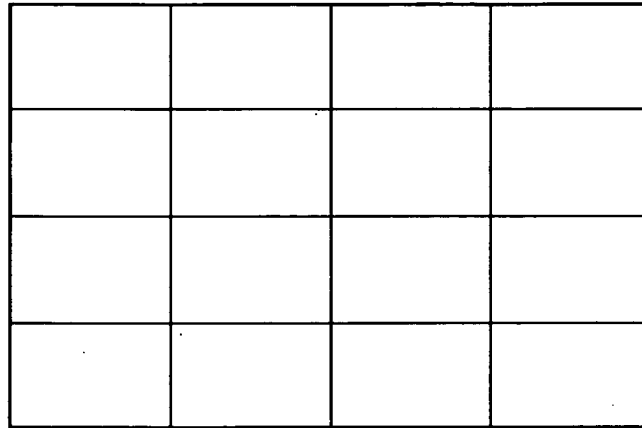
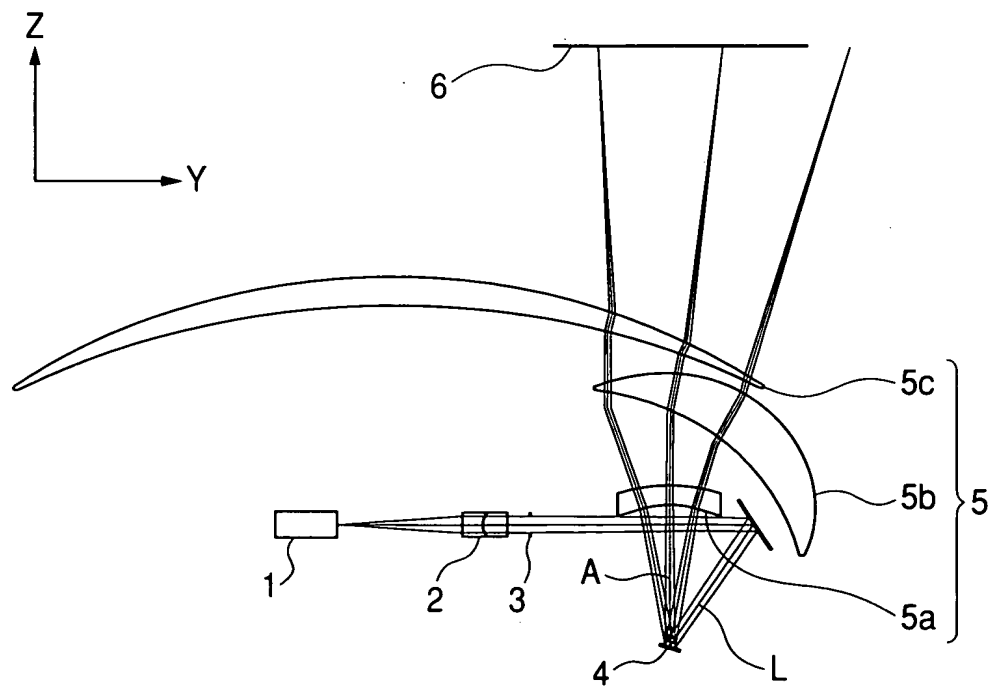
**FIG. 36****FIG. 37**

**FIG. 38**

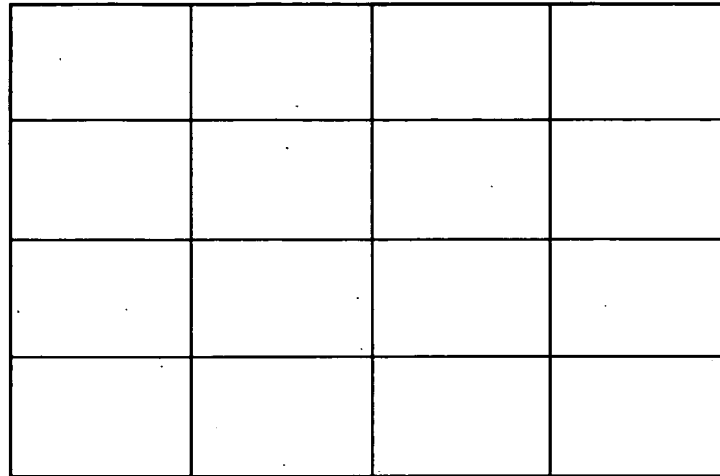
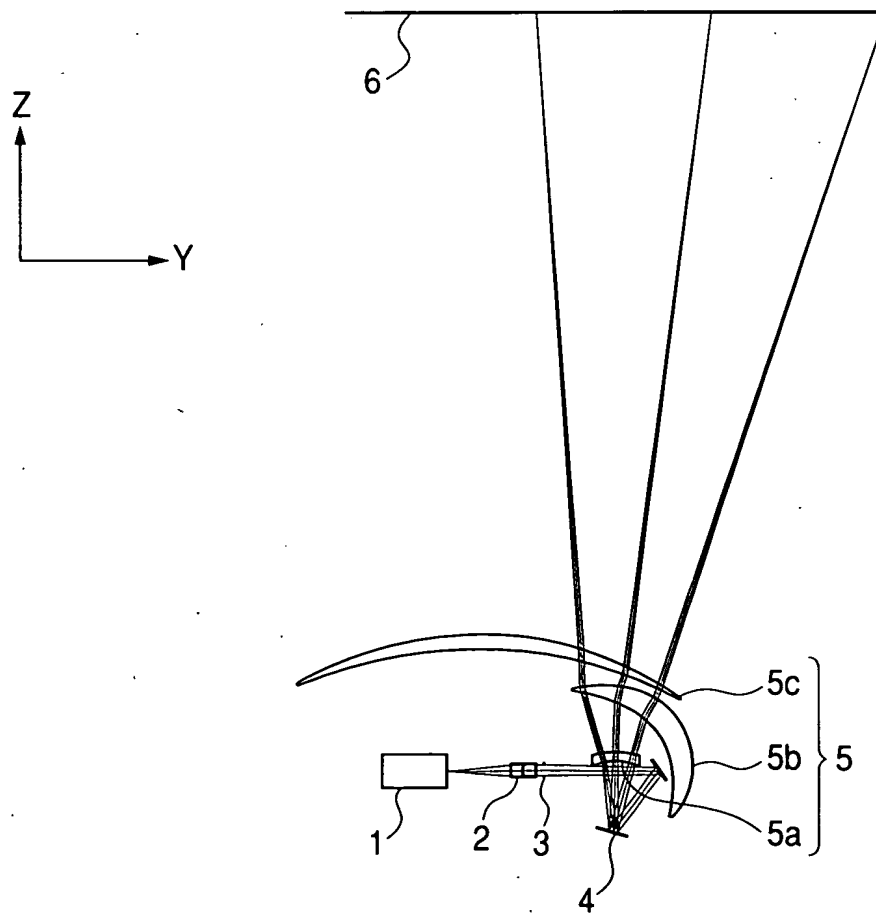


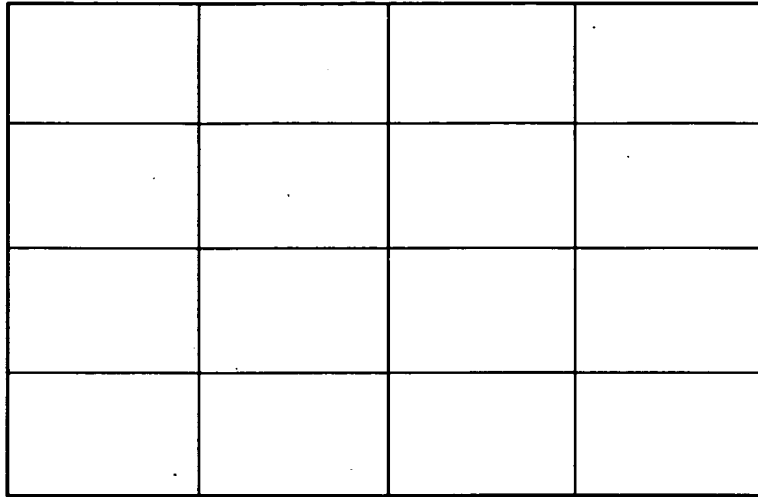
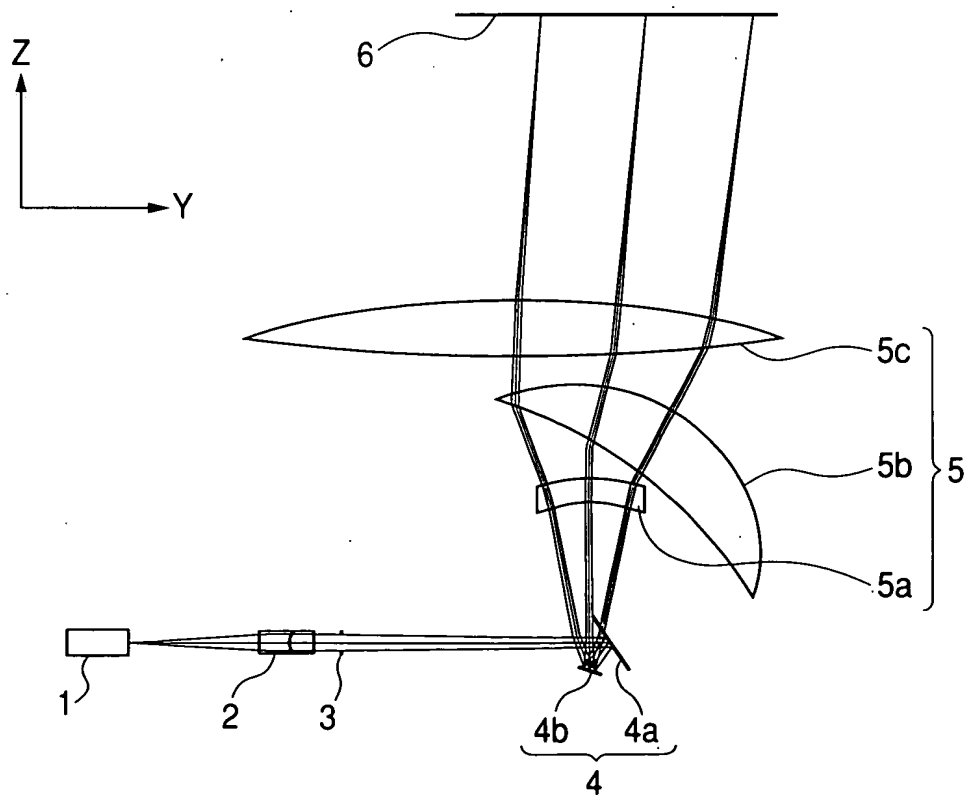
**FIG. 39**

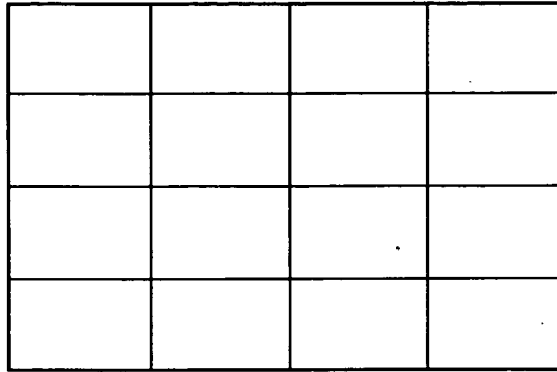
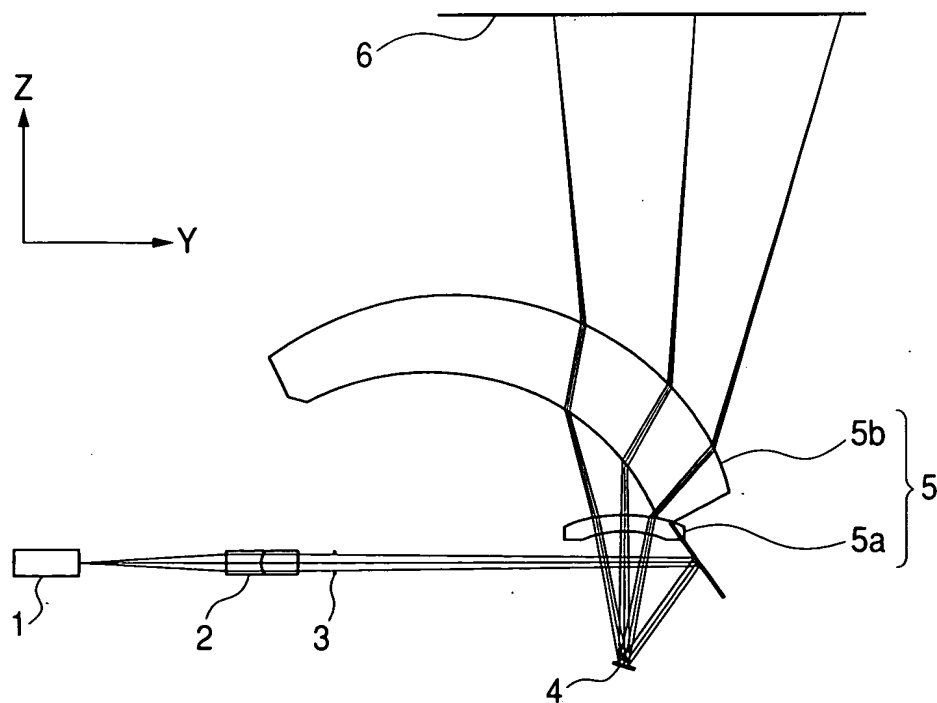


*FIG. 40**FIG. 41*



**FIG. 42****FIG. 43**

**FIG. 44****FIG. 45**

*FIG. 46**FIG. 47*

*FIG. 48*
